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# Factors Influencing Supplier Performance: Evidence from Farmers in West Java, Indonesia

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*Abstract*—**The purpose of this study is to investigate factors that may affect farmers' performance in the buyer-seller relationship within the agribusiness supply chain. Those factors include benevolence, structural formalization and contract completeness, dependency, and power. The author investigates how the five variables may impact cooperativeness and performance. The respondents for this study are a hundred farmers from Cianjur, Gunung Halu, and Garut. The primary data then analyzed using descriptive statistics and path analysis. The results show that dependency influence performance through power and cooperativeness, meanwhile benevolence influences performance through cooperativeness.**

*Keywords*— *benevolence, power, dependency, contractual completeness, structural formalization, cooperativeness, and supplier performance*

## 1.     Introduction

Agribusiness in Indonesia still faces many problems, like the non-existent of variety, quality, the coherence of supply and quantity with the demand dynamics and customer preference. In an agribusiness industry, farmers serve as the supplier for organizations, such as big modern retailers, exporter, and food industry. Based on the preliminary study, those three organizations point out farmers' limited ability to meet their demands, especially regarding quality and quantity sustainability. Even farmer group or organization also tends to be incapable of fulfilling the quality and quantity required by food industries. Inadequate quality resulted in potentially a loss of profit of buyer because did not meet the demand.

Business is part of the social system in which the interaction between the economic, social, political, which determine the performance of the behavior of the parties who are involved in the B2B network paradigm Organizations are embedded within a network of exchange relationships. For an organization to survive, it needs to depend on other organization to deal with the uncertain environment [1]. Hence, the power of one institution is supposed to relate on the dependency they have on other parties within the network [2].

Firms use their power in business relationships to gain favorable exchange terms, a greater share of relationship benefits, or to coerce partners to do what they would otherwise not do [1]. If one party depends heavily on the other, then the other party will have the relative balance of power. Sometimes the need to dominate and control the other party becomes a tendency to occur at all levels of the supply chain. Difficulties arise in a case of abuse of power to suppress that weak parties undergo the less productive performance. However, we see also from the successful business practices that regardless of their power, businesses are interdependent of each other for the sake of their success, especially in agribusiness ecosystem. In an agribusiness ecosystem, both partners, no matter having high power or low power, can work together for the benefit of all parties involved.

Power and dependency are assumed to affect the performance of suppliers and buyers such as control, cooperation, and prevention of opportunistic behavior [3],[4]. Researchers have been widely and consistently demonstrated the importance of cooperative behavior and control mechanisms [5]. Marketing channel must cooperate and act as a unit for the maximization of channel profits. Management's role is to promote the cooperative dimensions with the purpose of improving channel performance. The cooperativeness is an essential prerequisite for maximizing profits both individually and collectively under uncertainty [6],[7]. Control cannot be avoided because of the opportunism and different goals exist between cooperating parties, market uncertainty, and imperfections what is stated in the contract [8],[9],[10]. Although contracts cannot eliminate opportunism, the formalization of the structure will strengthen of

contract as a control mechanism through establishing formal procedures and routines, rules, and regulations. The formalization of the structure will reduce uncertainty, conflict, and opportunism by providing institutional bound in vertical partnership [11]. Structural formalization describes the steps detailed controls and governance for ongoing operations, especially [12]. Furthermore, there is a research indicates that the contract completeness and the structural formalization are critical practices in emerging markets [13].

The primary purpose of this study is to analyze the relationships between supplier and buyer in a business-to-business relationship, specifically in the agriculture business to determine what factors contribute the most to increasing the supplier performance. For this study, we divide three factors that are affecting performance, the individual buyer factor, organizational factors, and business-to-business relationship. Buyer individual factor will be represented by benevolence variable, the organizational factor will be represented by structural formalization and contract completeness, and B2B relationship will be described by dependency and power.

## 2. Literature Review

### 2.1. Benevolence

Benevolence is the a beyond contract behavior conducted by giving party to a receiving party to improve the well-being of the receiving side by not exploiting them [14]. In this study, benevolence is categorized into affective benevolence, calculative benevolence, and normative benevolence. Affective benevolence reflects a firm's benevolence based on positive feelings leading to care about the other company's welfare [15]. Calculative benevolence demonstrates a firm's benevolence based mostly on cognitions – considerations of the costs and benefits experienced by the parties in the relationships [15]. Normative benevolence reflects a firm's benevolence based on the perceived obligation in an impersonal economic environment [15]. Furthermore, in this research, benevolence refers to buyer benevolence from the farmers' perspective. When the buyer shows benevolence, it is expected that the buyer is behaving in a way that it improves the farmers' well-being. Thus, when the buyer shows benevolence, it will reflect the level of buyer cooperativeness during the buyer-supplier relationship with the farmer.

### 2.2. Cooperativeness

Cooperativeness refers to related parties' attitude in working together toward the attainment of shared goals [16]. In this research, cooperativeness refers to buyers' cooperativeness from farmers' perspective. When the buyer shows a willingness to work alongside the farmer in achieving common goals, the farmer's performance will increase as well.

### 2.3. Performance

Performance is an accomplishment measured regarding overall ratings of satisfaction [17]. In this study, supplier performance referred to farmers' performance as a result of the supplier-buyer relationship and classified into two types, tangible performance, and intangible performance. Tangible performance includes increasing profitability, reduce cost and increase sales. Meanwhile, intangible performance includes a stable business relationship, flexibility in doing business, better value, less conflict between farmers and their buyer [18].

### 2.4. Power

Power in supply chain relationships refers to the ability of one party to influence the other [19]. In this study, power refers to farmer's power.
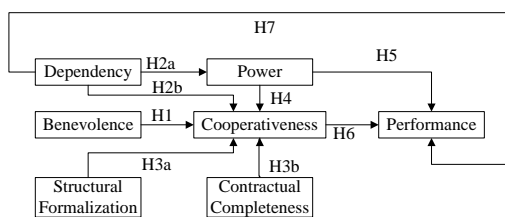
### 2.5. Dependency

Dependency is a condition where one party depends on the other. In business relationships, dependency is a relationship between conditions, events, or tasks such that one cannot begin or be completed until one or more other conditions, events, or functions have occurred, started, or completed.

### 2.6. Structural formalization

Structural formalization is where formalized, and routine procedures, rules, practices, regulations, and policies are established [18], [20]. Formal structure will explisitly detailed the expectations of the buyer that guides how the supplier should meet those expectations [12].

### 2.7. Contractual Completeness

Contractual completeness is a legal framework that explains buyers' and suppliers' rights, duties, and responsibilities, as well as procedures and policies involving the joint activities [13]. By having a complete contract that governs the relationship between involved parties, it is expected that both sides will be willing to be more cooperative and redusing the likelihood of opportunistics behavior [11], [3].

**Figure 1.** Theoretical Framework

Based on the literature review, the relationship between dependency, power, benevolence, cooperativeness, structural formalization, and performance is described in Figure 1.

Hypothesis 1: Benevolence is significantly related to cooperativeness.

Hypothesis 2a: Dependency is significantly related to power.

Hypothesis 2b: Dependency is significantly related to cooperativeness.

Hypothesis 3a: Structural formalization is significantly related to cooperation.

Hypothesis 3b: Contractual completeness is significantly related to cooperation.

Hypothesis 4: Power is significantly related to cooperativeness

Hypothesis 5: Power is significantly related to performance.

Hypothesis 6: Cooperativeness is significantly related to performance.

Hypothesis 7: Dependency is significantly related to performance.

## 3. Method
### 3.1. Sampling Method

The research is a quantitative study. The sampling method used in this research is nonprobability, convenience sampling. A hundred questionnaire was distributed to a hundred farmers in Cianjur, Gunung Halu, or Garut. These places were chosen based on their specific geographical identity in West Java area; Pandanwangi rice, Java Preanger coffee, and Vetiver respectively. The questionnaires were distributed from June to August 2016 and were distributed in Bahasa Indonesia.

### 3.2. Questionnaire Design

The questionnaire comprises two main parts, the respondent profile and farmer perception towards the factors affecting cooperativeness and supplier performance. The respondent profile section contains questions such as age, occupation, education, farming duration, farming area, and total employee.

The second part of the questionnaire discusses factors that affecting the performance between supplier and buyer relationship from farmer perspective as the supplier. The questionnaire was designed using 7-points Likert scale from 1 (strongly disagree) to 7 (strongly agree. The variable measured affective benevolence, calculative benevolence, normative benevolence, cooperativeness, dependency, power, contractual completeness, structural formalization, and performance.

In this research, benevolence refers to buyer benevolence from the farmers' perspective. Affective benevolence was measured using 3 item questions developed by [15]. Calculative benevolence was measured using 3 item scale developed by Wang [15]. There were five questions applied to measure normative benevolence which was also adopted from [15]). Cooperativeness measures attitude towards working on shared goals [16]. To measure cooperativeness, we use eight items adopted from [21]. Dependency was measured using five indicators adopted from [13], [22]. In this study, dependency refers to farmers' dependency to their buyer. Power was measured using 3 item questions adopted from [21], [23]. In this study, contractual completeness was measured using three items adapted from [10], [13]. To measure structural formalization, five items were adopted from [13], [24]. Performance was measured using 12 item measures adopted [18].

### 3.3. Data Analysis

Data obtained from the questionnaire are analyzed using descriptive statistics and path analysis. Path coefficient is used to examine the possible causal linkage, the correlation between variables in the framework. To check the structural path significance, to see if the hypotheses are supported, this research uses a procedure called bootstrapping in SmartPLS. For a two-tailed t-test with a significance level of 5%, the path coefficient will be significant if the T-statistics is larger than 1.96. The greater the magnitude of T, the greater the evidence against the null hypotheses, hence the greater the evidence that the hypotheses are supported. To re-confirm, if the T-statistics scores higher than 1.96, the P-value has to score below 0.05.

## 4. Results and findings
### 4.1. Respondent Profile

This section describes the respondent profile of this research, which are based on age, occupation, and educational background. Out of all a hundred respondents, most of the respondents are in the 25-40 years old group with 38 people, but the 41-55 years old group came in second with only one person differences, with 37 people. It was also surprising that so many older people are still working as farmers - a job that is physically demanding - with the oldest respondent being 73 years old. All but four of our respondents are farmers. Four people who work as a middleman also work or once worked as farmers. This is intended as the focus in this research is from the

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supplier's point of view. Almost half of the respondents are SD (primary school) graduates. This is low for Indonesian standard. One of the reasons they are not too eager to take on higher education is because they came from a family of farmers and intends to continue taking care of their family land, hence they feel like no higher education is needed. In terms of duration of farming, 36.89% of the respondents have been farming less than 5 years, 33.98% of them have been farming for 6 to 10 years, and the rest have been a farmer for up to 40 years. Ninety one point two six percent of respondent have land less than 2 Ha. Seventy six point seven percent of the respondents employs up to 50 people.

### 4.2. Affective Benevolence

Based on Table 1, most of the respondents feel that their buyers have an affection and an emotional connection with them, but not on a high level (4.63). They believe that their consumers see them as more than just on a professional level, but not so much that they are emotionally attached (4.48, 68% agree). A very high number respondents (81%) agree that they feel their business relationship has some personal meaning to the buyers.

**Table 1.** Affective Benevolence

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| AB emotional | This buyer has an emotional attachment to our company and cares about our company's welfare | 68 | 4.48 |
| AB personal | The success of our relationship has a personal meaning to this buyer | 81 | 4.71 |
| AB motivate | This buyer's positive feelings toward our company is a strong force that motivates them to care about our company | 80 | 4.72 |
| Total | | | 4.63 |

### 4.3. Calculative Benevolence

**Table 2.** Calculative Benevolence

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| CBcare | This buyer cares about us because we can increase their profits | 78 | 4.86 |
| CBdevelop | This buyer wants us to do well because of their interest | 77 | 4.81 |
| CBwelfare | This buyer can turn a profit for themselves from this relationship. Hence they care about our welfare | 67 | 4.23 |
| Total | | | 4.63 |

Based on Table 2, the respondents feel that their

buyers care about them because of cost-related reasons. They believe that their buyers care about them and want them to do well not because of emotional reasons, but because their partners feel they can give them profits. A relatively lower number of respondents agree that their buyer cares about their welfare because they are seen to be able to turn profits for their customers (67% agree).

### 4.4. Normative Benevolence

According to Table 1, Table 2 and Table 3, by average, normative benevolence scores the lowest between the three benevolences. The respondents feel that the buyers care about them because they feel like they are obligated to do so, but not as much as because of personal and cost-related reasons. The five indicators in this variable show that according to farmers, their buyers do some level of benevolence, though not at a very high level.

**Table 3.** Normative Benevolence

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| NBmoral | This buyer has a moral sense of obligation to care for us | 71 | 4.38 |
| NBunethical | This buyer thinks that it is unethical to neglect our well-being | 68 | 4.3 |
| NBresponsible | This buyer undertakes the responsibility of caring about our welfare | 71 | 4.46 |
| NBwelfare | This buyer would feel guilty if they overlook our welfare | 69 | 4.33 |
| NBessential | This buyer feels that it is important to care about our welfare | 70 | 4.36 |
| Total | | | 4.37 |

### 4.5. Cooperativeness

Table 4 shows buyer cooperativeness toward supplier. The total mean indicates that there is a relatively high willingness to work together to achieve common goals between farmers and their buyer. The highest being COPrelationship when farmers feel that the buyers have the desire and ability to maintain a healthy trading relationship with them, a very large percentage of respondents agree on that indicator. It scores the highest because it is the nature of their buying-selling relationship. When a party finds a partner that they are comfortable with, they will try their best to cooperate so that they could have a good and long relationship. The COP operations fall below half the score because evidently, the buyers do not care that much about helping the respondents' operational system profitable as long as the partnership is valuable to them.

**Table 4.** Cooperativeness

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| COPsincere | This buyer shows a sincere interest in our success | 72 | 4.74 |
| COPteam | This buyer works well as a team with us | 71 | 4.63 |
| COPrelationship | This buyer has the desire and ability to maintain a good trading relationship with us | 92 | 5.62 |
| COPproblem | This buyer searches for solutions to any joint problems we have | 71 | 4.47 |
| COPoperations | This buyer is interested in helping us to make the operational system profitable | 41 | 3.42 |
| COPinformed | We can always rely on this buyer to inform important information to us promptly | 69 | 4.58 |
| COPfair | This buyer is generally fair in working with us | 65 | 4.04 |
| COPgenuine | This buyer has a genuine interest in our continued business | 70 | 4.69 |
| Total | | | 4.52 |

## 4.6. Dependency

Based on Table 5, it turns out that farmers depend on their buyer to some extent. However, the level of their dependence is not too much because they feel that they have other alternatives. Finding other buyer alternatives are not without difficulty. Farmers still believe that they will find difficulty in the future without their current buyers, as proved in the DEP suffer indicator with a score of 5.08. Compared to other variables, the percentage of agree respondents is relatively small. Only half of the respondents believe that the cost they have to pay would be higher if they were to leave their partner.

**Table 5.** Dependency

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| DEPcost | The cost we will have to pay would be higher if we leave our current buyer | 52 | 3.57 |
| DEPdifficult | It would be difficult for us in the future to replace the sales and profits generated from our current buyer | 58 | 4.08 |
| DEPsuffer | We will see difficulty in the future without our current buyer | 78 | 5.08 |

| DEPimpact | This buyer has a deep impact on our various decisions | 60 | 4.07 |
|---|---|---|---|
| DEPreplace | It would be easy for us to replace this buyer | 56 | 4.02 |
| Total | | | 4.16 |

## 4.7. Power

Based on Table 6, it shows that the farmer has limited power. From the respondent perspective, it would not be easy for them to switch from one buyer to another, to find a more profitable buyer. Furthermore, the farmer's operational system will be disturbed to some extent when their buyer chooses other suppliers.

**Table 6.** Power

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| PowerFarm1 | It will be easy for us to switch from current buyer to another. | 56 | 4.00 |
| PowerFarm2 | Our operational system will be in a serious problem if our current buyer left us. | 61 | 4.01 |
| PowerFarm3 | It is easy for us to obtain more profitable buyer | 53 | 3.88 |
| Total | | | 3.96 |

## 4.8. Contractual Completeness

Based on Table 7, contractual completeness indicator scores relatively small with every indicator scoring below 3.2, and only 39%-41% of the respondents agree on the indicators. The low scores show that the contract is not very important to the respondents. The respondents live in the village where written contracts are not as common as in the cities. The educational level (half of the respondents are primary school graduates) of the respondents may also contribute to them not being too familiar with legal contracts. The limited awareness on contract completeness can be a problem for parties from bigger companies who wish to be their partners as they will have a low level of tolerance for ambiguity. It can also be a disadvantage to the respondents because, without a binding and detailed contract, there will be gaps where dishonest parties can take advantage.

**Table 7.** Contractual Completeness

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| CCwritten | Farmer relationship with this buyer is governed by explicitly described and clearly written contract terms | 39 | 3.19 |
| CCcontract | The contract includes everything we think important | 41 | 3.2 |
| CCdetails | We (farmer) and this buyer have included all details into the contract | 39 | 3.12 |

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| | | | |
|---|---|---|---|
| Total | | | 3.17 |

## 4.9. Structural Formalization

Based on Table 8, farmers acknowledge that there is a formalized and routine procedures before transaction, shown by an overall score of 4.25. While Table 7 shows that there is a limited need for complete contract prior doing business with their buyer, farmers and their buyers do some formal structure in their transaction. The SFquality scores the highest because evidently, before doing business with the respondents, the buyer evaluated them extensively on the quality control procedures.

**Table 8.** Structural Formalization

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| SFsystematic | This buyer and we (farmer) have developed systematic and integrated rules to deal with various joint activities | 58 | 4.04 |
| SFgoals | This buyer and we (farmer) have established specific goals and objectives for common benefits | 58 | 4.19 |
| SFregulations | This buyer and we (farmer) have formed many regulations and policies to be abided by together | 53 | 3.85 |
| SFcapability | Before doing business with our company (farmer), the buyer evaluated us extensively on the capability of our team | 53 | 3.81 |
| SFquality | Before doing business with our company (farmer), the buyer evaluated us extensively on our quality control procedures | 85 | 5.38 |
| Total | | | 4.25 |

## 4.10. Supplier Performance

Supplier performance refers to farmers' performance as a result of business-to-business relationship between farmers and their buyer. The main advantage of a business-to-business relationship for the respondents is stability and flexibility, which are proven in the PER stability and PER flexibility indicator that scores above five as shown in Table 9. Even the lowest indicator still scores 3.67, showing that performance is a critical aspect and advantage of a business-to-business relationship. The respondents feel that their performance and the advantage they gain will be better if they had a relationship rather than they do not.

**Table 9.** Performance

| Indicator | Question | % Agree | Mean |
|---|---|---|---|
| PERstability | One of the main advantages of this relationship is stability | 82 | 5.19 |
| PERflexibility | One of the main advantages of this relationship is flexibility | 86 | 5.23 |
| PERvalue | A lot of value has been created in this relationship | 69 | 4.44 |
| PERconflict | This relationship reduces the probability of conflicts that may happen within us | 55 | 3.67 |
| PERconflictbuyer | This relationship reduces the probability of conflicts that may happen between our us and the buyer | 57 | 3.75 |
| PERuncertainty | This relationship reduces many business uncertainties | 77 | 4.97 |
| PERpressure | This relationship reduces much pressure in production | 68 | 4.59 |
| PERcost | The overall costs of running this relationship are lower in comparison to others | 64 | 3.95 |
| PERprofitability | The profitability of this relationship is higher in comparison to alternatives | 69 | 4.21 |
| PERsold | The amount of crops sold in this relationship is larger than if we sold it ourselves | 80 | 4.86 |
| PERsoldpartner | The amount of crops sold in this relationship is larger than if we sold it with other partners | 84 | 4.93 |
| PERprice | The prices we pay in this relationship are lower than in comparable ones | 65 | 4.1 |
| Total | | | 4.49 |

## 4.11. Reliability and Validity

To measure internal consistency reliability in this research, the author chooses to use Cronbach's Alpha. Among nine variables, the only dependency has $\alpha$ below 0.7, which is the dependency ($\alpha$=0.645).

Based on the convergent validity outer loading value, it is concluded that affective benevolence and calculative benevolence are not valid. Thus from here

on, benevolence refers to normative benevolence.

## 4.12. Path Analysis

**Table 10.** Hypothesis Test Result

| Hypothesis | Standard Deviation (STDEV) | T Statistics | P Values | Result |
|---|---|---|---|---|
| Benevolence → Cooperativeness (H1) | 0.066 | 2.806 | 0.005 | Supported |
| Dependency → Power (H2a) | 0.112 | 2.927 | 0.004 | Supported |
| Dependency → Cooperativeness (H2b) | 0.095 | 0.908 | 0.364 | Not supported |
| Structural Formalization → Cooperativeness (H3a) | 0.108 | 3.515 | 0.000 | Supported |
| Contractual Completeness → Cooperativeness (H3b) | 0.108 | 1.430 | 0.153 | Not supported |
| Power → Cooperativeness (H4) | 0.091 | 2.683 | 0.008 | Supported |
| Power → Performance (H5) | 0.117 | 0.584 | 0.559 | Not supported |
| Cooperativeess → Performance (H6) | 0.111 | 3.216 | 0.001 | Supported |
| Dependency → Performance (H7) | 0.147 | 3.474 | 0.001 | Supported |

Table 10 shows the result of hypothesis testing in the study. H1 hypothesis, normative benevolence has a positive and significant relationship with cooperativeness, is supported. Buyer shows the normative benevolence through their moral sense to take care farmers, care and responsible to farmers' wellbeing and welfare. The higher the level of buyers' normative benevolence, the higher buyer cooperativeness in maintaining a good trading relationship, giving solution to any joint problem, providing important information and willing to have a continuous trading relationship with farmers.

Hypothesis H2a was also strongly supported. It means the more dependent the respondents are to their buyer, the less power they have, because when the respondents are dependent to their buyer, the buyer will hold a bigger relative power upon the respondents.

Hypothesis H2b was not supported. Evidently, farmer dependency does not positively affect cooperativeness. Even though farmers are dependent toward their buyer to some extent, in reality, farmers do have the choice of selling their produce to multiple buyers. Likewise, buyers also have the choice of buying the produce from multiple suppliers. However, the buyer does have more flexibility in choosing their supplier since their primary motivation is to have a good trading relationship.

Structural formalization positively affects cooperativeness, and hypothesis H3a was supported. Having a formalized partnership like developing systematic and integrated rules, establishing shared goals and objectives, and forming regulations and policies pushes the respondents to be cooperative to their buyers. Because by making a structural formalization, when the farmers perform right, they will also get the benefits.

Hypothesis H3b was not supported. Contractual completeness did not positively affect cooperativeness. Based on the descriptive statistics, in this study, the score for contractual completeness is relatively low. The reason is probably that the respondents are not too familiar with the use of legalized agreement due to their limited education background.

Hypothesis H4 was supported. Power positively affected cooperativeness. The more power that the farmers have, buyers will be more willing to work together with the farmers.

Hypothesis H5, the significant relationship between power and performance, was not supported. Thus, there is no relationship between the power that farmers have and their performance as a result of the supplier-buyer relationship.

Cooperativeness also positively affects performance. Thus, hypothesis H6 was supported. In this study, supplier performance is the consequences of business-to-business relationship between farmers and their buyer. When farmers and their buyer increase the willingness to work together to achieve the common goal, farmers will have a better performance in both tangible and intangible aspects of the performance.

H7 was strongly supported. It suggests that farmers who perceive a higher level of dependence towards their suppliers will experience improved performance since dependency can manifest in a commitment to improving services, creating value-added processes, expanding product offerings, or diversifying their business to improve confidence and efficacy. Therefore, when there is a higher dependency, it is more likely for farmers to have an increasing profitability, reducing cost, increasing sales, having a stable relationship, having more flexibility, having better value, and also having less conflict with their buyer.

Based on Table 10, some relationships are not significant, since the T-statistics are less than T-Table (1.96), which are contractual completeness and cooperativeness, dependency and cooperativeness, and power and performance. Therefore, those relationships are removed from the model.

Figure 2 describes the final model for this study. In the case of farmers in West Java, dependency is positively and significantly related to power (-0.511) and supplier performance (0.510). Power (0.243), benevolence (0.185), and structural formalization (0.380) are positively and

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significantly related to cooperativeness. Lastly, cooperativeness also has a positive and significant relationship to supplier performance.
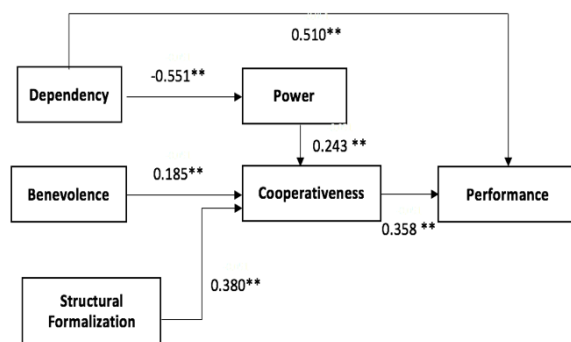


**Figure 2.** Path Model

\* = Significant at 0.05 level
\*\* = Significant at 0.1 level
\*\*\* = Significant at 0.0 level

## 5.    Conclusions

The primary objective of this study is to analyze the relationships between supplier and buyer in a business-to-business relationship, specifically in the agriculture business to determine what factors contribute the most to increasing the supplier performance. The result shows that supplier performance is affected by farmer dependency to their buyer and buyer cooperativeness. By realizing that one cannot survive without the assistance of other, parties in the B2B relationship will tend to cooperate. Cooperativeness will be able to increase supplier performance because by being cooperative, both sides of the parties will be able to conjoin their goals and vision into a common goal, which will make it easier to work together. Buyers' normative benevolence, structural formalization, and power does provide a meaningful impact to cooperativeness. Buyers feel obliged to protect its supply for their business to survive. Structural formalization provides a framework for doing business between farmers and its buyer. Meanwhile, power only has an indirect influence on performance through cooperativeness. Unlike structural formalization, contractual completeness did not have a significant impact to cooperativeness. This study contributes by providing an empirical evidence how the individual buyer factor, organizational factors, and business-to-business relationship affecting the farmers performance. For future research, it may be beneficial to conduct similar research from the buyer point of view. Secondly, the current study only focuses on three areas in West Java, which may not represent the farmers' perspective in Indonesia. Future research may be done in a wider area coverage so that it will be a more general representation of farmers in Indonesia.

## References

[1]    Pfeffer, J., Salancik, G. R., *"The external control of organizations: A resource dependence perspective"*, New York: Harper & Row, 1978.

[2]    Medcof, J., *"Resource-based strategy and managerial power in networks of internationally dispersed technology units"*, Strategic Management Journal, Vol. 22 No. 11, 999–1012, 2001.

[3]    Wathne, K., Heide, J., *"Opportunism in interfirm relationships: Forms*, outcomes, and solutions", Journal of Marketing, Vol. 64 No. 4, pp.36-51, 2000.

[4]    Tangpong, C., Michalisin, M., Traub, R., Melcher, A., *"A review of buyer-supplier relationship typologies: progress, problems, and future directions"*, Journal of Business and Industrial Marketing, Vol. 30 No. 2, pp.153-170, 2015.

[5]    Ganesan, S., *"Determinants of long-term orientation in buyer-seller relationships"*, Journal of Marketing, Vol. 58 No. 2, pp.1-19, 1994

[6]    Dyer, J., Singh, H., *"The relational view: cooperative strategy and sources of interorganizational competitive advantage"*, Academy of Management Review, Vol. 23 No. 4, pp.660-679, 1998.

[7]    Poppo, L., Zenger, T., *"Do formal contracts and relational Governance function as substitutes or complements?"*, Strategic Management journal, Vol. 23 No. 8, pp.707–725, 2002.

[8]    Eisenhardt, K., *"Control: organizational and economic approaches"*, Management Science, Vol. 31 No. 2, pp.134-149, 1985.

[9]    Heide, J., *"Interorganizational governance in marketing channel"*, Journal of Marketing, Vol. 58 No. 1, pp.71-85, 1994.

[10]    Jap, S., Anderson, E., *"Safeguarding interorganizational performance and continuity under ex post opportunism"*, Management Science, Vol. 49 No. 12, 1684–1701, 2003.

[11]    Kotabe, M., Martin, X., Domoto, H., *"Gaining from vertical partnerships: knowledge transfer, relationship duration, and supplier performance improvement in the US and Japanese automotive industries"*, Strategic Management Journal, Vol. 24 No. 4, pp.293–316, 2003.

[12]    Reuer, J., Arino, A., *"Strategic alliance contracts: dimensions and determinants of contractual complexity"*, Strategic Management Journal,Vol. 28 No. 3, pp.313–330, 2007.

[13]    Luo, Y., Liu, Y., Zhang, L., Huang, Y., *"A taxonomy of control mechanisms and effects on channel cooperation in China"*, Journal of the Academy of Marketing Science, Vol. 39

No. 2, pp.307-326, 2011.

[14] Lee, D. J., Sirgi, M. J., Brown, J. R., Bird, M. M., "*Importers' benevolence toward their foreign suppliers*", Journal of the Academy of Marketing Science, Vol 32 No 1, pp.32-48, 2004.

[15] Wang, Q., "*Asymmetrical Buyer-Supplier Relationships: The Role of Perceived Benevolence*", Unpublished PhD thesis, University of Florida, Gainesville, United States, 2006.

[16] Hallen, L. and Sandstorm, M. "*Relationship atmosphere in international business*", in: Paliwoda, S.J.(Ed.), New Perspectives on International Marketing, London, Routledge, 1991.

[17] Noordewier, T., John, G., Nevin, J. "*Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships*", Journal of Marketing, Vol. 54 No.4, pp.80-93, 1990.

[18] O"Toole, T., Donaldson, B., "*Relationship performance dimensions of buyer-supplier exchanges*", European Journal Of Purchasing and Supply Management,Vol. 8, pp.197–207, 2002.

[19] Nyaga, G., Lynch, D., Marshall, D., Ambrose, E., "*Power asymmetry, adaptation, and collaboration in dyadic relationship involving a powerful partner*", Journal of Supply Chain Management, Vol. 49 No. 3, pp.42–65, 2013.

[20] Heide, J., John, G., "*Do norms matter in marketing relationships*?", Journal of Marketing, Vol. 56 No. 2, pp.32-44, 1992.

[21] Wong, C., Wilkinson, I., & Young, L., " Towards an empirically based taxonomy of buyer-seller relations in business markets", Journal of the Academy Of Marketing Science, Vol. 38 No. 6, pp.720–737, 2010

[22] Geyskens, I., Steenkamp, J-B. E.M., Kumar, N., "*A meta-analysis of satisfaction in marketing channel relationships*", Journal of Marketing Research, Vol. 36 No. 2, pp.223-238, 1999.

[23] Dabholkar, P., Johnston, W., Cathey, A., "*The dynamics of long-term business-to-business exchange relationships*", Journal of the Academy of Marketing Science, Vol. 22 No. 2, pp.130-145, 1994.

[24] Claro, D., Claro, P., Hagelaar, G., "*Coordinating collaborative joint efforts with suppliers: the effects of trust, transaction specific investment and information network in the Dutch flower industry*", Supply Chain Management: An International Journal, Vol. 11 No. 3, pp.216-224, 2006.