



# Psychological Effect of Brand Image and Brand Reputation on Sustainable Firm Performance in Indonesian Logistic Companies

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**Abstract-** This study examined the relationship between brand image, brand reputation, brand goodwill and sustainable firm performance (FP). The purpose of this study is to examine the psychological effect of brand image and brand reputation on sustainable FP of Indonesian logistic companies. This purpose was achieved by using primary data which was collected with the help of questionnaire. A survey was carried out among the Indonesian logistic companies with the help of questionnaires. 500 questionnaires were distributed, and 270 valid responses were used for data analysis. Smart PLS was used for data analysis. Results of the study highlighted that brand image and brand reputation has significant psychological effect on sustainable FP of logistic companies. Any change in the brand image and brand reputation has significant psychological effect which has contribution to decrease or increase the sustainable FP. Moreover, goodwill also has important role in sustainable FP. Both brand image and brand reputation effect on brand goodwill and finally, brand goodwill influences the sustainable FP.

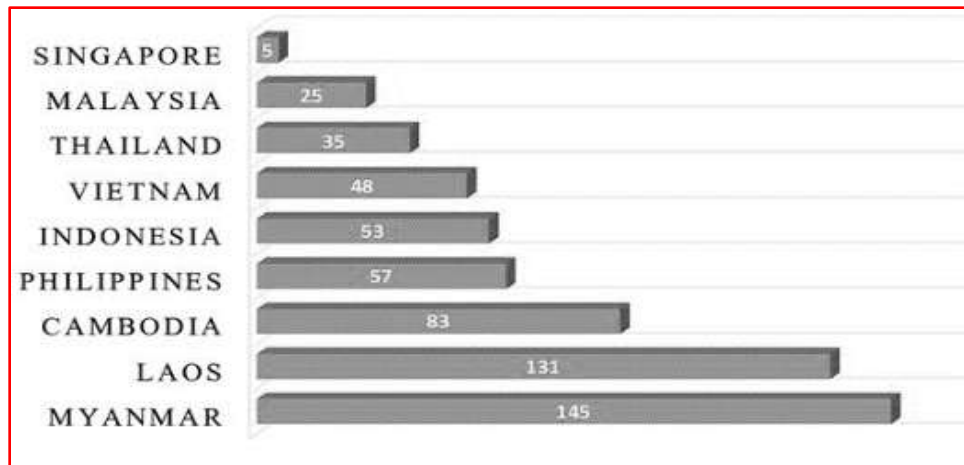
**Keywords:** Brand image, brand reputation, sustainable firm performance, brand goodwill, psychological effect.

## I. INTRODUCTION

Logistic companies are those companies which has significant role among the supply chain activities of various industries. In fact, logistic companies have vital role to support businesses and to perform in right direction. These companies also have significant importance for the economy as the smooth working of various sectors is heavily based on the logistics. It is also mentioned by previous studies that logistic has important role in economy (Makarova et al., 2020). Logistic companies have significant role to provide economic opportunities for people which lead to increase in gross-domestic product (GDP). By examining the positive role of logistic companies, it is evident that logistic companies' performance is most important. Low performance of these companies has significant negative influence on economy by influencing the businesses.

However, various logistic companies are facing number of issues which as considerable role to decrease the performance. Particularly, the Indonesian companies are facing different issues in performance. In this regard, these companies cannot sustain reasonable performance. Due to number of issues, logistics companies are facing the issues of sustainable firm performance (FP). Sustainable FP is always required for the consistent growth. Sustainable performance is always important for the companies (Azeem, Mataruna-Dos-Santos, & Abdallah, 2020; Shahab et al., 2020). There are many factors effecting sustainable FP in logistic companies. However, this study is involved with three major factors; brand image, brand reputation and brand goodwill.

Indonesian logistic is one of the most important sector of Indonesia (Soma, Kubota, & Mizuno, 2019) and its sustainable performance is most key for the country to run the other businesses. This sector of Indonesia is also struggling due to various issues related to the sustainable performance. Therefore, this study examined the sustainable performance in respect to different factors which effect on sustainable FP. Indonesian logistic companies ranking is given in Figure 1 which shows that the performance of Indonesian logistic is low as compared to the other countries. Logistic department of Indonesia has 53 ranking among various countries. This performance is low due to the issues in sustainable FP.



*Figure 1. Asian Countries Logistic Ranking*

Source: Doktoralina and Apollo (2019)

In this direction, the current study proposed that brand image and brand reputation have psychological effect on logistic companies. Number of studies examined brand image and brand reputation (Iglesias, Markovic, Singh, & Sierra, 2019; Kim, Choe, & Petrick, 2018; Martínez-Ferrero & García-Sánchez, 2018), however, literature is missing the psychological role of brand image and brand reputation. Therefore, this study filled this gap examining the psychological effect of brand image and brand reputation on sustainable FP. Along with this, number of scholars considered logistic performance (Endrawati & Siregar, 2018; Hameed, Shabbir, Raza, & Salman, 2018; Sriyakul, Umam, & Jermsittiparsert, 2019), however, sustainable performance in respect to the psychological effect of brand image and brand reputation is not considered in Indonesian logistic companies.

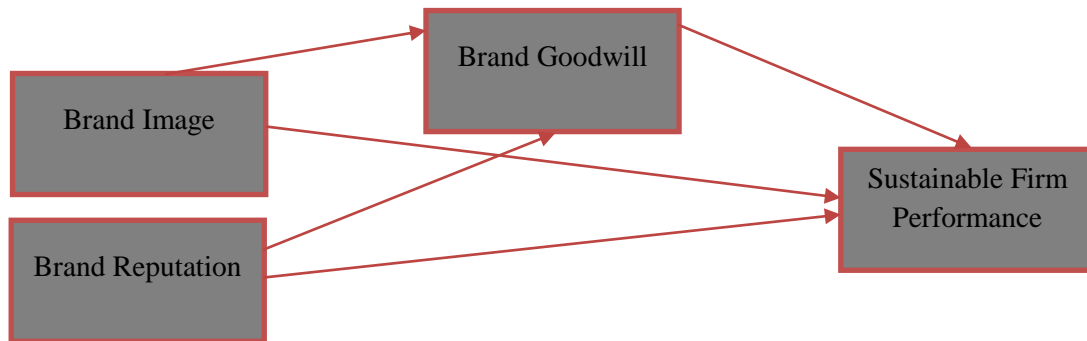
Along with the psychological effect of brand image and brand reputation, brand goodwill also has effect on sustainable FP. Any change in goodwill has direct effect on sustainable FP of logistic companies. In this regard, this study examined the relationship between brand image, brand reputation, brand goodwill and sustainable FP. Hence, purpose of this study is to examine the psychological effect of brand image and brand reputation on sustainable FP of Indonesian logistic companies. This is the vital study which considered the above-mentioned relationship in logistic companies of Indonesia. It has both practical as well as theoretical implications both for the logistic companies and literature.

## II. LITERATURE REVIEW

The firm performance is comprising organizational performance, functioning of the firm and outcomes of its operations. It has significant contribution to the firm activities. Performance is always vital for the survival of the company. It is important because in competitive environment, the FP is most important (Tumasjan, Kunze, Bruch, & Welp, 2020). Those firms which hold a sustainable performance generally survive in the market. The sustainable FP finally leads to the higher performance. Sustainability is the capability of a structure to exist continually at a cost, in a universe that grows towards equilibrium. In context of business, sustainability is the state of continuous performance by a specific company in same circumstances with same cost. In the today's environment, sustainability is one of the major concerns among organizations. Decrease in the sustainable performance shows negative effect on business, however, increase in the sustainability shows positive effect on business. The current study is also dealing with sustainable FP among logistic companies of Indonesia. In the context of logistic companies, sustainable FP denotes to the sustainable quality of services for the logistic companies. It has the ability to help the company in competitive environment. As it is evident from literature that FP has crucial role in competitive environment (RHEE & STEPHENS, 2020). There are number of factors which effect on FP of logistic companies. Generally, the brand image and brand reputation have important role to develop and increase better FP. Both brand image and brand reputation have

important to increase the rate of survival in a competitive environment by increasing the FP. Brand image and brand reputation has positive effect on company goodwill. Better brand image and brand reputation increase the company goodwill which has significant potential to increase the FP. Moreover, goodwill of the company also has significant role to enhance FP. Figure 2 highlighted the relationship between brand image, brand reputation, brand goodwill and sustainable FP.

### Psychological Effect



*Figure 2. Theoretical framework of the study showing the relationship between brand image, brand reputation, brand goodwill and sustainable FP.*

#### 2.1 Brand Image and Sustainable FP

The general impression of a product held by real or potential consumers is called brand image. Brand image has significant effect on sustainable FP with the help of various ways. Most of the studies examined the direct effect of brand image on FP (Adwiyah et al., 2020), however, none of the study examined the psychological role of brand image on sustainable FP. Good brand image has psychological role. Good brand creates an image in the minds of consumer which lead to the purchase intention. Psychological role has significant potential to enhance the sustainable FB. Better brand image forces the customers to purchase the product, however, weaker brand image has potential to develop the customer intention towards specific product. Therefore, this study examined the effect of brand image created through psychological effect on sustainable FP. Previous studies highlighted that brand image has positive influence on FP (Iglesias et al., 2019; Sultan & Wong, 2019), however, these studies did not discuss the sustainable FP. In this direction, this study examined the psychological effect of brand image on sustainable BP.

**Hypothesis 1.** Brand image has positive influence on sustainable FP.

#### 2.2 Brand Reputation and Sustainable FP

Brand reputation denotes to how a specific brand (for individual or company) is observed by others. A satisfactory brand reputation means customer trust on company product and feel good about purchasing goods or services of a specific company. Various studies are carried out in the field of brand reputation (Fiaz et al., 2019) and examined the impact of brand image in company in respect to the sale of product and services, success of brand and performance of the company. However, the current study is working in a unique way and examine the psychological effect of brand image on the minds of customer which can decrease or increase the FP. Along with this, number of studies carried out to examine the influence of brand reputation on FP (Turner & Adiguzel, 2017), however, sustainable FP performance is not examined by the previous studies. It is important to consider because literature is missing to check the relationship between psychological effect of brand reputation on sustainable FP. Literature highlighted a significant positive effect of reputation on performance (Na'ami & Gholampoor, 2017) which lead to the below hypothesis;

**Hypothesis 2.** Brand reputation has positive influence on sustainable FP.

### 2.3 Brand Image and Brand Goodwill

Goodwill is an intangible asset of any business that rises when a buyer obtains an existing business. Goodwill signifies assets that are not distinctly identifiable. Goodwill is somewhat similar to the reputation. A good reputation of the company of any brand is also clear a goodwill which causes to create interest among the customer related to the specific brand or company and attract them to buy the product. According to the literature, goodwill has important role in businesses (Murray & Vogel, 1997; Souza & Borba, 2017). There is a relationship between brand image and goodwill. In change in the brand image has the potential to increase or decrease the goodwill of the brand. Brand image has psychologically effect on customers which lead to the goodwill of the brand. This is the first study which examine the goodwill in respect to the psychological effect of brand image. In this regard, it has significant contribution to the literature. The relationship between psychological effect of brand image and goodwill has importance influence on customer which lead to the performance. It also has the potential to satisfy the customer and customer satisfaction is key to the success of business (Nadeem, Alvi, & Iqbal, 2018).

**Hypothesis 3.** Brand image has positive influence on brand goodwill.

### 2.4 Brand Reputation and Brand Goodwill

Along with the positive effect of brand image on brand goodwill, brand reputation also has effect on brand goodwill. Increase in the brand reputation has significant impact to change the level of brand goodwill. Literature is already missing with the relationship of brand reputation and brand goodwill. Especially, this relationship is not examined by previous studies in logistic companies. The element of brand reputation is already examined in logistic companies (Świtała, Gamrot, Reformat, & Bilińska-Reformat, 2018), moreover the element of goodwill is also examined in supply chain or logistic companies (Emerson, Zhou, & Piramuthu, 2009), however, the combine relationship of brand reputation is not examined with brand goodwill. Therefore, this is the unique study which examined the effect of brand reputation on brand goodwill. Brand image has significant role to create good brand goodwill. Especially, it is important because this study examining the psychological effect of brand reputation on brand goodwill.

**Hypothesis 4.** Brand reputation has positive influence on brand goodwill.

### 2.5 Brand Goodwill and Sustainable FP

Firm's profitability generally depends on the FP, better FP lead to the better firm profitability. Therefore, it is always the major concern of companies to enhance the overall FP. The ultimate objective of the companies is to increase profit and maximize the wealth of shareholders, in this regard FP has central role to play. Increase in the profitability has significant role to increase shareholders wealth (Dwomoh, Boachie, & Kwarteng, 2017). The case is similar in logistic companies in which performance is key to the profitability. However, for this whole mechanism, the sustainable performance is required. Fluctuation in performance is not lead to the success, that is the reason, logistic companies required sustainable performance which is considered in this study. Studies also highlighted that that sustainable performance is most important (Ahmed et al., 2020; Lu, Hsu, Liou, & Lo, 2018). This study examined the relationship between brand goodwill and sustainable FP. This is a unique relationship which is not examined in previous studies. Especially, in case of logistic companies this relationship is very rare. Hence, it is leading to the below hypothesis;

**Hypothesis 5.** Brand goodwill has positive influence on sustainable FP.

### 2.6 Mediating Role of Brand Goodwill

Along with the other discussion, this study also discusses the mediating role of brand goodwill. The mediating role of brand goodwill is discussed between brand image and sustainable FP. Moreover, the mediating role of brand goodwill is also discussed between brand reputation and sustainable FP. For mediation effect, this study followed Baron and Kenny (1986) approach. Above discussion highlighted that brand image and brand reputation has significant relationship with brand goodwill and brand sustainable FP. Brand goodwill also has

significant relationship with sustainable FP. Hence, these relationships justify the mediating role of brand goodwill which lead to the below hypotheses;

**Hypothesis 6.** Brand goodwill mediates the relationship between brand image and sustainable FP.

**Hypothesis 7.** Brand goodwill mediates the relationship between brand reputation and sustainable FP.

### III. RESEARCH METHODOLOGY

Research methodology is an important part of all research studies (Scandura & Williams, 2000) because it has major role in research. As this study examined the relationship between brand image, brand reputation, brand goodwill and sustainable FP, in this direction, the current study followed quantitative research approach along with the cross-sectional research design. It is very important to highlight because there is numerous research design to examine the relationship among variables, therefore, appropriate research design is most important to select for better results.

Population of the study is based on the logistic companies of Indonesia. These companies were selected because the issues were found in these companies' sustainable performance. These companies are unable to perform in a sustainable manner. Hence, this study collected the data from logistic companies. The employee of these companies was selected to get response. Employee were selected because employee have better ideas about the performance of these companies rather than customers of the companies. Sustainable performance was measured in respect to the last three years. With the comparison of last three years performance, it was supposed that whether the logistic companies are carrying sustainable performance or there is variation in performance.

Therefore, a survey was carried out among the Indonesian logistic companies with the help of questionnaires. 500 questionnaires were distributed, and 270 valid responses were used for data analysis. Cluster sampling is an appropriate technique to collect the data in a wide spread population (Altaf, Hameed, Nadeem, & Arfan, 2019), hence, cluster sampling was used for data collection. Moreover, data were collected by using the email survey. Email addresses of the company employee were gathered by contacting with the logistic companies and questionnaire were send with the help of email. Remainders were also sent to the employee those who did not respond to the survey.

### IV. DATA ANALYSIS AND FINDINGS

Missing value has the tendency to change the original results. Along with the missing value, outlier in the data, it also has the tendency to alter the results. Therefore, it is very important to check the missing value and outlier in the data. In case of any missing value and outlier, it must be fixed before further analysis. In this direction, the current study also make assessment for missing value and outlier which is given in Table 1. It is indicated that the current data has no missing value and outlier.

*Table 1. Missing Value and Outlier*

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
BI1	1	0	3.638	3	1	7	1.948	-0.86	0.321
BI2	2	0	3.506	3	1	7	1.867	-0.64	0.423
BI3	3	0	3.538	4	1	7	2.006	-1.057	0.231
BR1	4	0	3.525	3	1	7	1.861	-0.763	0.298
BR2	5	0	3.737	4	1	7	1.73	-0.554	0.258
BR3	6	0	3	3	1	7	1.5	-0.122	0.628
BR4	7	0	3.1	3	1	7	1.501	0.626	1.004

BR5	8	0	3.2	3	1	7	1.457	0.907	1.018
BR6	9	0	3.075	3	1	7	1.551	0.446	0.867
BR7	10	0	3.038	3	1	7	1.462	0.678	0.82
BG1	11	0	3.112	3	1	7	1.624	0.282	0.806
BG2	12	0	3.119	3	1	7	1.551	0.554	0.886
BG3	13	0	2.944	3	1	7	1.472	-0.043	0.561
BG4	14	0	3.131	3	1	7	1.432	0.653	0.785
BG5	15	0	3.025	3	1	7	1.508	0.437	0.807
BG6	16	0	3.038	3	1	7	1.557	0.292	0.78
BG7	17	0	3.144	3	1	7	1.524	-0.212	0.631
SFP1	18	0	3.031	3	1	7	1.447	0.274	0.645
SFP2	19	0	2.956	3	1	7	1.429	-0.164	0.584
SFP3	20	0	3.119	3	1	7	1.411	0.206	0.689
SFP4	21	0	3.106	3	1	7	1.511	-0.118	0.707
SFP5	22	0	3.1	3	1	7	1.513	0.041	0.703
SFP6	23	0	3.081	3	1	7	1.414	0.144	0.685
SFP7	24	0	3.175	3	1	7	1.759	-0.701	0.349
SFP8	25	0	3.219	3	1	7	1.916	-0.843	0.454

After the analysis of data for missing value and outlier, this study examined the measurement model for factor loadings, composite reliability (CR) and average variance extracted (AVE). Factor loadings, alpha, CR and AVE must be above 0.7, 0.7, 0.7 and 0.5, respectively (Hair, Hollingsworth, Randolph, & Chong, 2017). Discriminant validity is confirmed with help of cross-loadings as given in Table 3. Table 2 shows CR and AVE which is above 0.7 and 0.5, respectively. Moreover, factor loading is given in Figure 3 and appendix (Table 1).

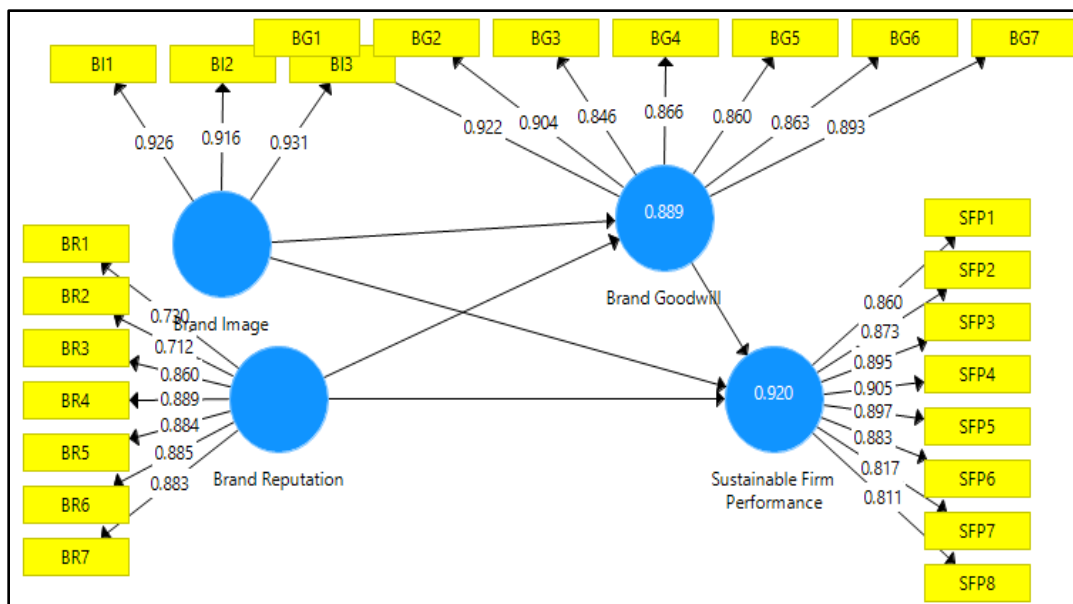


Figure 3. Measurement Model

Table 2. Cronbach Alpha, CR and AVE

	Alpha	rho_A	CR	AVE
Brand Goodwill	0.951	0.952	0.96	0.774
Brand Image	0.915	0.919	0.946	0.854
Brand Reputation	0.929	0.941	0.943	0.702
Sustainable Firm Performance	0.953	0.954	0.961	0.754

Table 3. Cross-Loadings

	Brand Goodwill	Brand Image	Brand Reputation	Sustainable Firm Performance
BG1	0.922	0.559	0.873	0.854
BG2	0.904	0.558	0.882	0.872
BG3	0.846	0.508	0.815	0.792
BG4	0.866	0.509	0.808	0.836
BG5	0.86	0.467	0.755	0.816
BG6	0.863	0.539	0.81	0.818
BG7	0.893	0.442	0.821	0.873
BI1	0.525	0.926	0.622	0.546
BI2	0.496	0.916	0.62	0.538
BI3	0.587	0.931	0.695	0.595
BR1	0.584	0.825	0.83	0.589
BR2	0.566	0.798	0.812	0.596
BR3	0.822	0.512	0.86	0.836
BR4	0.849	0.552	0.889	0.84
BR5	0.858	0.503	0.884	0.848
BR6	0.874	0.506	0.885	0.85
BR7	0.86	0.587	0.883	0.842
SFP1	0.825	0.48	0.805	0.86
SFP2	0.836	0.492	0.812	0.873
SFP3	0.837	0.569	0.84	0.895
SFP4	0.842	0.527	0.837	0.905
SFP5	0.87	0.558	0.862	0.897
SFP6	0.853	0.508	0.819	0.883
SFP7	0.794	0.496	0.753	0.817
SFP8	0.751	0.592	0.739	0.811

Along the measurement model, structural was used to test the hypothesis(Dahri, Hameed, Nawaz, Sami, & Bux Shah, 2019; Hamid, Shahid, Hameed, Amin, & Mehmood, 2019). The effect of brand image, brand reputation and goodwill were examined on sustainable FP. Moreover, effect of brand image and brand reputation was examined on goodwill. All these five hypotheses were based on the direct effect of variables. All the direct effect is supported as the t-value is above 1.96 which is shown in Table 4 and Figure 4.

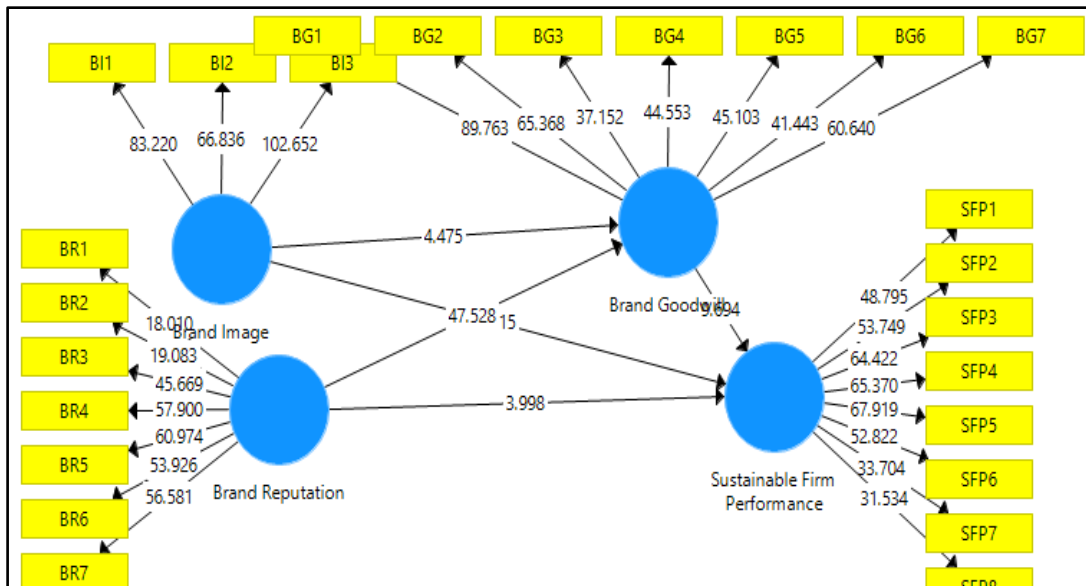


Figure 4. Structural Model

Table 4. Direct Effect

	(O)	(M)	SD	T Statistics	P Values
Brand Goodwill -> Sustainable Firm Performance	0.647	0.651	0.067	9.694	0
Brand Image -> Brand Goodwill	0.145	0.14	0.032	4.475	0
Brand Image -> Sustainable Firm Performance	0.024	0.002	0.011	2.115	0.043
Brand Reputation -> Brand Goodwill	1.039	1.036	0.022	47.528	0
Brand Reputation -> Sustainable Firm Performance	0.324	0.32	0.081	3.998	0

Indirect effect of the study is given in Table 5. Results of the study shows that brand image and brand reputation have significant relationship with brand goodwill and brand sustainable FP. Brand goodwill also has significant relationship with sustainable FP. In this significant relationship, the brand goodwill also playing a mediating role. Finally, the mediation effect of brand goodwill is given in Figure 5 and Figure 6.

Table 5. Indirect Effect

	(O)	(M)	SD	T Statistics	P Values
Brand Image -> Brand Goodwill -> Sustainable Firm Performance	-0.094	-0.091	0.021	4.443	0
Brand Reputation -> Brand Goodwill -> Sustainable Firm Performance	0.672	0.674	0.069	9.679	0



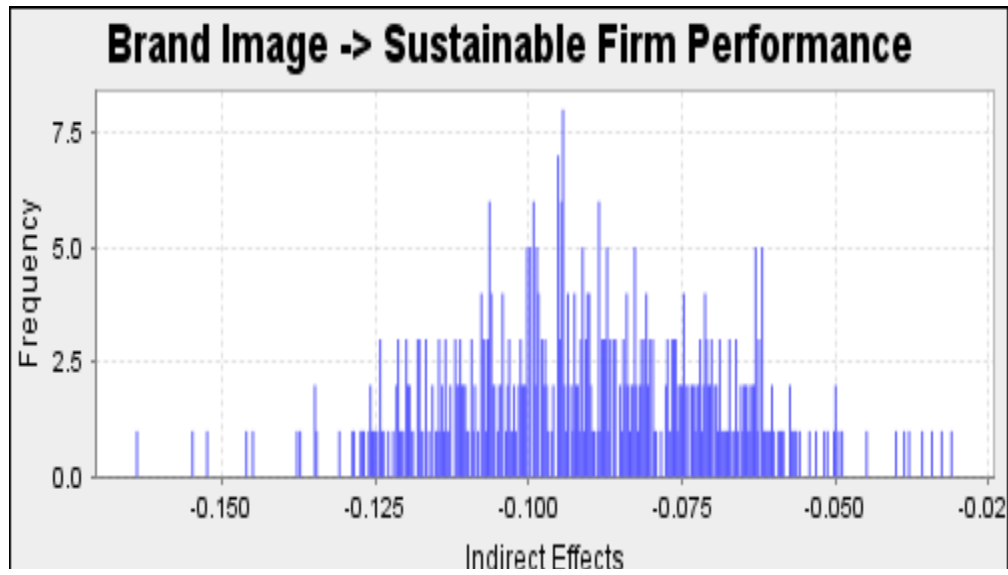


Figure 5. Indirect effect between Brand Image and Sustainable FP

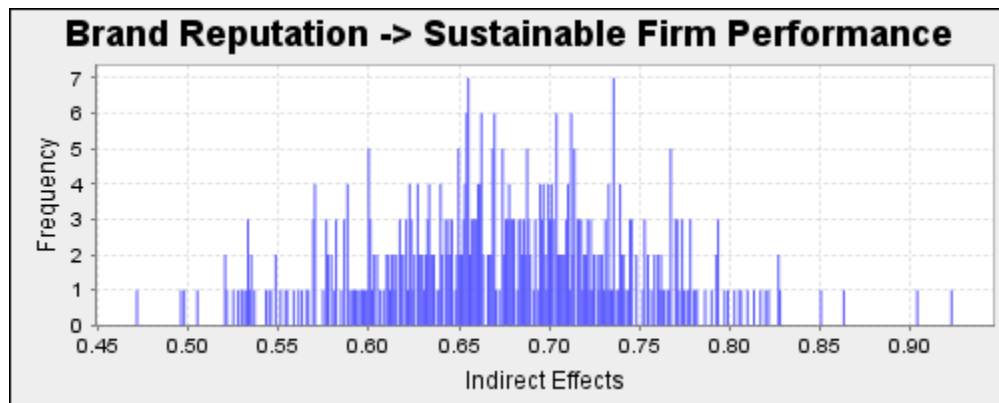


Figure 6. Indirect effect between Brand Reputation and Sustainable FP

## V. CONCLUSION

This study examined the relationship between brand image, brand reputation, brand goodwill and sustainable firm performance (FP). Population of the study was Indonesian logistic companies. After conducting a research survey, this study highlighted that brand image and brand reputation has significant psychological effect on sustainable FP of logistic companies. Any change in the psychological effect of brand image and brand reputation has direct and indirect effect on sustainable FP. With the direct effect of brand image and brand reputation on the sustainable FP, it also has indirect effect through brand goodwill. Brand goodwill transfer the positive effect of brand image and brand reputation on sustainable FP. Any change in the brand image and brand reputation's psychological effect has significant contribution to decrease or increase the sustainable FP. Therefore, logistic companies should enhance the brand image and brand reputation. Moreover, goodwill also has important role in sustainable FP. Both brand image and brand reputation effect on brand goodwill and finally, brand goodwill influences the sustainable FP.

### 5.1 Implications of the Study

This study examined the relationship between brand image, brand reputation, brand goodwill and sustainable firm performance (FP). This is most valuable relationship, which is examined in the logistic

companies, particularly, the Indonesian logistic companies. This relationship is clear contribution to the literature because psychological effect of brand image and brand reputation is not examined by the literature. Especially, this relationship is not examined with sustainable FP among Indonesian logistic companies. In the filed of practical contribution, again this study is vital for the logistic companies. As the logistic companies of Indonesia are facing the problem of sustainable FP, in this regard, this study suggested the companies should promote the psychological effect of brand image and brand reputation along with brand goodwill to enhance sustainable FP.

## VI. LIMITATIONS AND FUTURE DIRECTIONS

Limitations of every research study is always lead to valuable future directions. Therefore, the limitations of this study are very much helpful to work in future and fill the literature gap in the field of logistic companies. First of all, this study is based on the logistic companies and results of this study cannot apply on other companies because this study addressed the unique issues of sustainable FP among logistic companies. Therefore, future studies should be separated to various other companies in relation to the psychological effect of brand image and brand reputation. Moreover, this study is limited to the developing country, future study should be carried out on developed countries. In addition to this, now the companies are moving towards electronic logistics. Therefore, future research should cover the electronic logistics.

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