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THE PART OF ROLE RELATIONAL BONDING: MODERATING RELATIONSHIP BETWEEN GREEN LOGISTICS AND SUSTAINABILITY PERFORMANCE

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ABSTRACT

Previous studies have noticed the effects of the practice green logistics management towards sustainability performance. However, little research has been performed to observe the substantive position of relational bonding (structural bonding) in the context of green logistics management. This research attempts to discover the relational ties and look at the connection between the practice of green logistics management, structural bonding, and sustainability performance. The result of the hypotheses are tested using fishery industries in Indonesia data of 283 samples, utilizing primary and secondary data. The results showed that the practice of green logistics and the structural bonding dealing positively correlated with the sustainability performance. Structural bonding has been found to moderate the relationship between the practice of green logistics management and sustainability performance.

Keywords: green logistics; structural bonding; sustainability performance.

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1. INTRODUCTION

Cold storage fish distributors in the logistics sector in Indonesia and around the globe still considers the application of environmentally friendly logistics (green logistics) as something

that is expensive and is contrary to the principles of business that is oriented towards the achievement of profit [1-3]. The application of green logistics is not necessarily an expensive new equipment investment. The application of green logistics can be done through operational practices are efficient and environmentally friendly [4]. Eco-driving for example could be one of the examples of the application of green logistics through the technique or how to drive a fleet of good fish [5-6]. If it needs to be done to equipment investment or new fish transport fleet to be able to adopt the green logistics, efficiency is obtained in the long term can be expected to exceed the value of the investment are issued.

Fish distributors companies have to make the right investment strategy to get a sustainable competitiveness. It can be seen from the success of a renowned transport company which regularly perform replacement of the fleet transporting fresh fish or perishable food with a fleet age of maximum 5 years [6]. In addition to being expensive maintenance costs, fuel consumption rate of the fleet is older than 5 years it also became high. ASEAN countries can no longer implement a variety of barrier to inhibit the flow of goods as well as services, including logistics services [6]. However, ASEAN countries could still be "inhibiting" logistics services inflows from other ASEAN countries through the issue of green logistics. For example, Indonesia can set a limit on emissions of a specific permission as a condition of the fleet transportation (trucks) to transport fish/perishable food would return to his country [5]. Of course, cold storage transport from Indonesia and other countries that emission levels exceeding the limit will not be able to get into the country. The company owner of the goods (manufactures, retailers) and global logistics companies can also assign the fulfillment of "green logistics", as one of the terms of the partnership business. Thus, the implementation of green logistics could be a deciding factor of competitiveness, both in global logistics practice nor the MEA [4, 7-8]. Low energy usage efficiency is expected to have an impact towards the cost of an efficient ports anyway. The application of green logistics includes the interconnectedness of many parties [3, 8-9].

For road transport for example related parties of which the truck manufacturer (manufacturer of the fleet), the Ministry of industry (motor vehicle architecture), the Ministry of transportation (type test and periodic test exhaust emissions of motor vehicles), Ministry of

Environment (exhaust emission thresholds), the Ministry of Mineral Resources (development of fuel specifications), Pertamina Indonesia (production and distribution of fuel) and Police (enforcement regulations) [10-13]. The owner of the goods (manufacturers and retailers) is also a party to the acts encourage the implementation of green logistics. Recommendation the implementation of green logistics of logistics industry [1-2], like the rejuvenation of the fleet of air-high exhaust emissions; the application of eco-driving; the application of strategies, techniques and an efficient logistic operation; the utilization of information technology to support logistic operations; collaboration among principals and transportation companies, transportation companies and manufacturing/retailer [2, 8]. Recommendation the implementation of green logistics for the government, such as the improvement of the quality of fuels; an increasing number of distribution and refueling facilities is environmentally friendly; the granting of incentives the rejuvenation of the fleet transportation company; and granting incentives for logistics service providers implement green logistics [4].

For the rejuvenation of the fleet, the Government needs to provide incentives in the form of input VAT exemption (VAT purchase trucks, tires, spare parts and others), because the company could not charge VAT (services output transport company is not the object VAT). In addition to facilitating the implementation of green logistics, incentives-incentives that will encourage an increase in the competitiveness of Indonesia's transport companies, including in the face of MEA [7, 10, 12]. However, preceding research has not taken into consideration the function of relational ties in green logistics management (GLM) could be beneficial to discover the effect of relational ties on sustainability performance [8]. For that reason, this studies targets to look at the relationship between the practice of green logistics, relational bonds and sustainability performance. This studies contributes to the broadening of the idea of relational bond with the context of green logistics management. Through figuring out the practices of inexperienced logistics key that influences sustainability performance, this studies development of green control literature to describe how green practices are expecting sustainability overall performance. But, preceding research has no longer taken into consideration the function of relational ties in green logistics management (GLM) [8] would be beneficial to discover the effect of relational ties on sustainability performance. Therefore,

this research goals to observe the connection among the exercise of green logistics, relational bonds and sustainability performance [14-16]. This studies contributes to the broadening of the idea of relational bond with the context of green logistics management. By identifying the practices of green logistics key that impacts sustainability performance, this research progress of green practices internal and external to predict sustainability performance [17]. Furthermore, these bonds can be a moderator of the connection between have an effect on noticeable practice green logistics management and sustainability overall performance, this examine recommend a path for relationship marketing evaluations powerful in green logistic management [2, 16]. This examination offers the sensible implications for the information of the critical position of relational bonds can play in reworking the exercise of green logistics, sustainability performance into the favored result. In case, suppliers offer my cold chain company a variety of ways to get information more efficiently. Then, information technology in the era of globalization such as organized at this time supports business process in the whole logistic process in order to become more effective and efficiently. Through a variety of ease of transport distributor interacts with the customer as well as the entire relation associated with its business [3, 18]. Problems of information technology does not help to support our suppliers in making managerial decisions and cooperation between groups of works, to be able to weaken the competitive position in the business process that is quickly changing. This applies when the information technology used does not support in the development of the resulting systems such as e-commerce and e-business or other business activities. Information technology is often forgotten in the organizational information systems to provide information for the users in the framework of decision making. For example, when there is no support of information technology in business processes in companies that depend on the homepage then it will not be interesting, difficult to sell and serve their customers, that business processes such as accounting office, warehouse inventory systems and other supported by information technology [2, 9, 14, 17, 19]. The main goal of the company achieved through the utilization of technology and information systems is to improve the quality of products and services as well as the speed of business processes. Accordingly, the national fisheries sector has problems with logistics aspects such as availability and continuity

of supply, price and the price disparity, as well as the quality of the fish. These problems have an impact on the cost of transporting the fish commodities more expensive than other countries. Potential fishery catches sea Indonesia around 6.5 million tons per year [5-6]. Meanwhile, the potential aquaculture brackish reach 2.96 million hectares and sea cultivation potential of achieving 12.55 million hectares. A number of issues and challenges in the fishery sector actually opening some logistics business opportunities, including the provision and management of cold storage distributors. Logistics is becoming a high priority in Indonesia because Indonesia is the largest archipelago in the world with a population of 240 million people about 60% live in Java island and 40% scattered across 13,000 islands uninhabited [12, 20]. In Indonesia, the transport sector accounted for exhaust emissions amounted to 23% of total national emissions. Specialized in urban areas, the condition can interfere with the health of the community [6, 21]. Road transport emissions 89% of transport sector emissions in total. The transportation sector in Indonesia the largest oil consuming i.e. 51% [10-12]. This is triggered by the increasing number of fleet. A few things to the attention of transit goods through road transport among other traffic accidents and damage to roads is increasing among others due to excess, truck payload: 70% of the goods transport on the road using a truck part big is old and poorly maintained, existence of obstacles for the truck still on the length of time the customs process because the parking is less efficient in the process of logistics services trade, transportation and logistics have not technology-based information increase the cost of logistics in addition to the still wild charges [10-11].

Thus, the researchers made the hypothesis in this study that, the role of structural bonding (SB) as a moderator variable can increase the positively significance of the relationship between green logistics (GL) towards sustainability performance (SP) on Fishery Cold Chain Distributor in Indonesia. This paper is structured in four sections further with previous literature reviews and give arguments to inform the working hypothesis. Then, describes the methodology used to test the hypothesis with results are presented and discussed while last gives an overview of the main conclusions of a very short paper and a particular challenge for future research.

2. THEORITICAL BACKGROUND

Based on past research, the researchers explain that the concept is resources based theory (RBT) [22] is taken into consideration one of the maximum broadly common principle to explain the competition and the achievement of the organization. This idea emphasizes that company resources and talents is the principle determinant for the organization's competitive gain and achievement. commercial enterprise activities need to consist of natural resource-based view (NRBV) of the organization [23], considering the limitations of natural resources as well as its impact on upkeep of the environment and in addition, contextualize the economic activities in the natural environment. Our studies explores the proactive environmental strategy mainly the supervision of product talents – one of the most unexplored the role of structural bonding with a scarcity of empirical research. Further and for the reason that no conclusive empirical evidence approximately the connection among green buying and sustainability performance as well as the want to do not forget the contingencies that affect these relationships, researchers explore the positive relationship between the implementation of green logistics and sustainability performance by analyzing how the interaction of moderation from the role of structural bonding can produce a sustainability performance in Indonesia fishery cold chain distributors can produce a sustainability performance.

2.1. Green Logistics

According to [4, 9] that in the logistics system, integrated management is going to produce and move merchandise to consumers through the supply chain. For some specific product supply chain began with the taking of existing raw materials, production and distribution. The event usually also elaborated into the transport charge, storage, storage management, management of materials and also all the information exchange process [1]. Logistics aims to meet the consumers' need with minimum cost. Therefore, most companies often overrule other external costs associated with the impact on the environment and social life around it to reduce costs, for example the impact on climate change, air pollution, sound, vibration and accidents [8].

Because that is where the green logistics arisen, with emphasis on the concept of reducing the impact of variety so that logistics becomes a sustainable system (the existence of a balance

between the aspects of social, economic and environment) [3]. Green logistics is a branch of the development of the concept of green supply chain [1, 24]. According to the state of the art one branch of science the concept of green supply chain comprises: green logistics and reverse logistics. From this concept could produce an expected in macro can produce lean logistics concepts with the concept of industry and environmentally friendly logistics (green) in a region [19].

Green logistics is a logistics concept ranging from the processing of goods to the consumer can use the item, with the emphasis does not damage the environment and use as many environmentally friendly raw materials [2]. After use, the goods sent back from the consumer to the manufacturer for repair or processed into goods that remain environmentally friendly (recycle). Green Logistics management is an economic activity that aims to serve customers and social development, linking suppliers and customers, overcome space and time barriers to achieving efficient and speedy movement of goods and services. This can stop the logistics of doing harm to the environment, while also can reach logistics environment purification, so that resources can be fully utilized mostly logistics [2, 4, 19].

These standards include (1) improved use of low-emission vehicles and low transport fleet, (2) optimization of transport ability through consolidation and scheduling and (3) decreased use of packaging and protecting materials through light-weight design [1-2, 8-9, 15]. Based on literature above, researchers give the hypothesis that Green Logistics (GL) has positive impact to sustainability performance (SP).

H1: There have positive impact between Green Logistics and Sustainability Performance on Fishery Cold Chain Distributors in Indonesia

2.2. Relational Bonding (Structural Bonding)

The measures for structural bonding comprised three objects: (1) provide of numerous methods to get statistics, (2) provision of information, examine reports or transaction information and (3) provision of products or services to resolve issues [15]. Many logistics companies or companies that want to send goods, in drag by yet the presence availability of infrastructure and reliable network, still limited the reach of the service network of non-cellular and normally use manual systems (paper based system) in logistics transactions

[14]. Physical distribution management system information concerning the problem of transporting the products to the subscription. In physical distribution, subscriptions seen as the last stop in the marketing channel. The material is information management concerns the acquisition of (procurement) and the transport of materials, spare parts and supplies or place of purchase to the place of manufacture/assembly of warehouse or store retailers [16]. Managerial support system for the preparation of long-term planning and budgeting operations. This system is in charge of finding and analyzing information about the social, political, environmental law, legislation and economics. From a country/more, next is also to find out about the health and prospects of the industry of the enterprise which the company concerned is located. It also contains information about its competitors [18, 25]. This system will provide information for planning and will reduce the amount of time that should be spent Planning Manager to gather information, so that managers will have more time to do other tasks. Internal transfer process is about surveillance against semi-finished components at the time it flows between the stages of manufacturing and transporting the finished products to the start of or to the retailer. With the role of structural bonding, then the integrated logistic management in applying to the green logistics management will be an information system designed to support managers in taking decision management/organization [14]. Therefore, these systems tend to be designed to service suppliers in the intermediate level (intermediate) senior. In particular, this system using the model. The model is a series of programs, usually containing mathematical equations which describe a problem or specific management tasks. With a little bit of change model or the data entered, then the supplier will be able to resolve the problem [16].

2.3. Sustainability Performance

In realizing sustainable performance logistics in order to increase the supply of environmentally friendly and to establish the competitiveness of logistics service industry, then the creation of demand of environmentally friendly financial products and increased oversight and sustainable finance coordination is the statement of sustainability performance prepared to describe the sustain condition of the company's past and used to predict future sustainability [26]. Based on the research and sustainability as a dependent variable will

describe to environmental performance. This study adopted a modified version of the definition of development and the capability of an organization to reduce the emissions, waste and the ability to reduce the consumption of hazardous and toxic materials and reduce the frequency of environmental accidents and environmental uncertainty. The study used a modified version and a definition for operational performance [27]. The study adopted an expanded definition version for economic performance. Therefore, sustainability performance is defined as an increase in financial and economy performance resulting from the application of green purchasing that lead to increased productivity in which the activities of the process and resources sides are maintained, so that there is no waste in terms of bureaucracy and administration, so that the company's position is compared with the average, the average industry is getting better. Financial improvements include increased costs for material purchases, reduced costs for energy consumption, reduced costs for waste disposal and reduced environmental accident costs. Marketing-based improvements include an increase in average sales, average profit growth and profit growth and an increase in average market share. Sustainability performance indicators are (1) environmental performance, (2) operational performance, (3) financial performance and (4) social performance [28-30]. In this research, researcher give the hypothesis that Indonesian Fishery Cold Chain Distributors have significant effect relationship between green logistics (GL) towards sustainability performance (SP) as a function of role of structural bonding in the structural model.

H2: There has a positive significant impact between Green Logistics (GL) and Sustainability Performance (SP) moderating by the role of structural bonding (SB) on Fishery Cold Chain Distributors in Indonesia.

3. METHODOLOGY

In the context of this study, the researchers analyzed the influence of interactions with moderated regression analysis (MRA) [31]. Researchers using linear regression by entering the third variable in the form of multiplication between two independent variables as moderating variables, not an error in the measurement of structural equation model, then one of the best solutions is changing the data into a form-mean centered before it is analyzed. A

Mean-Centered, the transformation of raw data into a variable with a mean difference. In the run Method Moderated of SEM (MSEM), researchers do with two stages [32]. The first stage, doing the estimation without inserting variable interactions, so the researchers only estimated models with each exogenous variable which is used to predict the endogenous variable [33]. The results of the output model is used to assess the loading factor variable interaction and the value of the error variance of latent variable interaction indicator [31]. The second phase, the results of the calculation of the value of the latent variable interaction factor loading is used to set the value of the parameter loading interaction while the results of manual calculation error variance interaction variable is used to set the error variance variable interaction [34]. To provide an overview of the application of this research use the interaction model of the relationship between green logistics and sustainability performance. Contingency model in this study stated that green logistics does not have direct influence on sustainability performance as shown in Fig. 1.

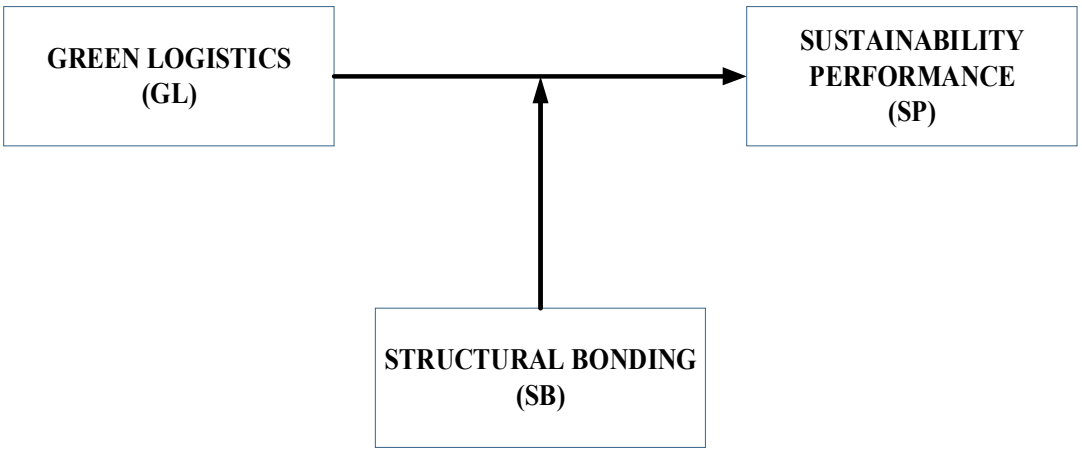

Fig.1. Conceptual framework

For the current study, Likert scales is used to measure the responses, since this scale is widely used in relational bonding research and has been extensively tested in social science [34]. The present study used a seven-point Likert scales for measuring all variables in this study. All of their comments and suggestions regarding the clarity, relevance (content/face validity) and consistencies of the questions incorporated into the survey instrument [32].

The data analysis technique is the ideal information for analysis, screening the facts. To identify statistics entry errors, data screening performance which includes missing data, outlier, normality, linearity, homoscedasticity, multi collinearity, validity, reliability, descriptive

information and check of response bias. Smart PLS 3.0 and WarpPLS 5.0 software program implemented to perform some of the statistical tests. Structural Equation Modelling (SEM) to test hypothesis testing and do analyze information. Researcher use reflective signs primarily based on views theoretical and empirical attention [32, 35].

Researchers give an overview about the results of this research, by explaining the influence of green purchasing practices towards sustainability performance with green corporate image as a moderator variable. Researchers do CFA [36] first order invalid constructs to test reliability and validity of items/indicator latent invalid constructs. Data collected from 283 respondents Indonesia Fishery Cold Chain Distributors. The model will be tested and analyzed by using the indicator product approach because all invalid constructs in the model reflective constructs/indicators.

Systematic random sampling the sampling frame is first divided into a number of segments called intervals. Then, from the first interval, using the SRS technique, one element is selected. In this research, a systematic random sample relies on some sort of ordering to choose sample all selected manager from each region 57's fish cold chain distributor (283 manager respondents). While the first individual chosen by a random method, subsequent members are chosen by means of a predetermined process. The selection of subsequent elements from other intervals is dependent upon the order of the element selected in the first interval. This random sampling use because eliminates bias by giving all individuals an equal chance to be chosen [35].

4. RESULTS AND DISCUSSION

General result by using WarpPLS 5.0 got result of model with good fit model where P-value for Average Path Coefficient (APC), Average R-Squared (ARS) and Average Adjust R-Squared (AARS) (< 0.001) with the value of APC = 0.456, (P < 0.001) the value of ARS = 0.784, (P < 0.001) and the value of AARS = 0.783, (P < 0.001). Likewise, the Average VIF (AVIF) and Average Full Collinearity VIF (AFVIF) 2.765 values are generated (< 3.3) [32] which means that there is no multicolinearity problem between indicators and between exogenous variables. The resulting GoF is (0.737 > 0.36) which means the fit model is very

good. For Symson's paradox index (SPR), R-Squared Contribution Ratio (RSCR) and Statistical Suppression Ratio (SSR) yields a value equal to 1, meaning there is no causality problem in the model. The nonlinear bivariate causality direction ration (NLBCDR) index yields (1,000 > 0.7) meaning that the non-linear causality relationship in the model is in the right direction [32].

Based on the results of the path's output and p values that variable Green logistics (GL) direct and significant influential variable against Sustainability Performance with value P-Value is generated and a value of P < 0.001, which path coefficients 0.868. There have positive impact between Green Logistics and Sustainability Performance on Fishery Cold Chain Distributors in Indonesia.

Based on the results of the standard errors output and effect sizes for path's above obtained, value of the standard error for the variable Green Logistics (GL) against the Sustainability Performance (SP) is 0.052. Then, the effect size of the resulting variable Green Logistics of 0.768, which means included in the category [31-32].

Table 1. Measurement validity convergent and discriminant

	R-Square	**Adj-R-Square**	**Composite Reliability**	**Cronbach Alpha**	**AVE**	**Q-Square**
GL			0.811	0.649	0.589	
SP	0.784	0.783	0.925	0.885	0.760	0.785
SB			0.962	0.941	0.895	

Adjust the R-Square of 0.784 meaning that the influence of variable Green Purchasing with moderate Green Corporate Image against Sustainability Performance is of 78.4% and the rest, 21.6% is influenced by other variables outside of a research model. It can be seen that the value of the AVE for any invalid constructs very good i.e. [> 0.5] [31-32, 37], so as to meet the criteria of validity of convergent. Composite Reliability for any invalid constructs are also very good i.e. > 0.7, so as to meet the internal consistency reliability [31-32]. Full value of collinearity VIF for invalid constructs has also very good (< 3.3) [32], so there is no problem of collinearity in the model Q-Squared values generated variable Sustainability Performance 0.785 > 0 which means that models have predictive relevance [33] as shown in Table 1. Good

discriminant validity shown on the square root of AVE for each construct is greater than the correlation between the constructs in the model. Reference expresses the rule of thumb reliability value that the use of Cronbach Alpha to test the reliability of the constructs will give lower value (under estimate), so it is preferable to use composite reliability should be greater than 0.60 - 0.70 is still acceptable for exploratory research [31-33]. The next step in analyzing the structure of the model rule of thumb for the recommended AVE value must be greater than 0.50. Each cross loading for each variable in the measurement model (> 0.70), means that 50% or more variance of the indicator can be explained [31-33, 36].

Table 2. AVE diagonal correlations among latent variable

	GP	**SP**	**GCI**	**GCI*GP**
GP	0.867	0.776	0.266	0.023
SP	0.776	0.872	0.304	0.017
GCI	0.266	0.304	0.924	-0.261
GCI*GP	0.023	0.017	-0.261	0.727

The results of the diagonal on the correlations among the latent variable indicates that the discriminant validity for all invalid constructs, with the value of the square roots of the resulting AVE > correlation between latent invalid constructs. Some previous studies said in the evaluation of the measurement model or models for the study of the outer model recommended to use their number of resampling of 5000 [31-32, 34-35, 38]. From the results of resampling with use their bootstrapping use their SMARTPLS 3.0 that all variable turned out to be a significant effect with a value of the T-statistics are generated for all variable > 1.96. In this study, the resulting loading factor all items/indicator invalid constructs very good i.e. > 0.70 which means it meets the criteria of reliability indicators [31-33, 36, 38] as shown in Fig. 2.

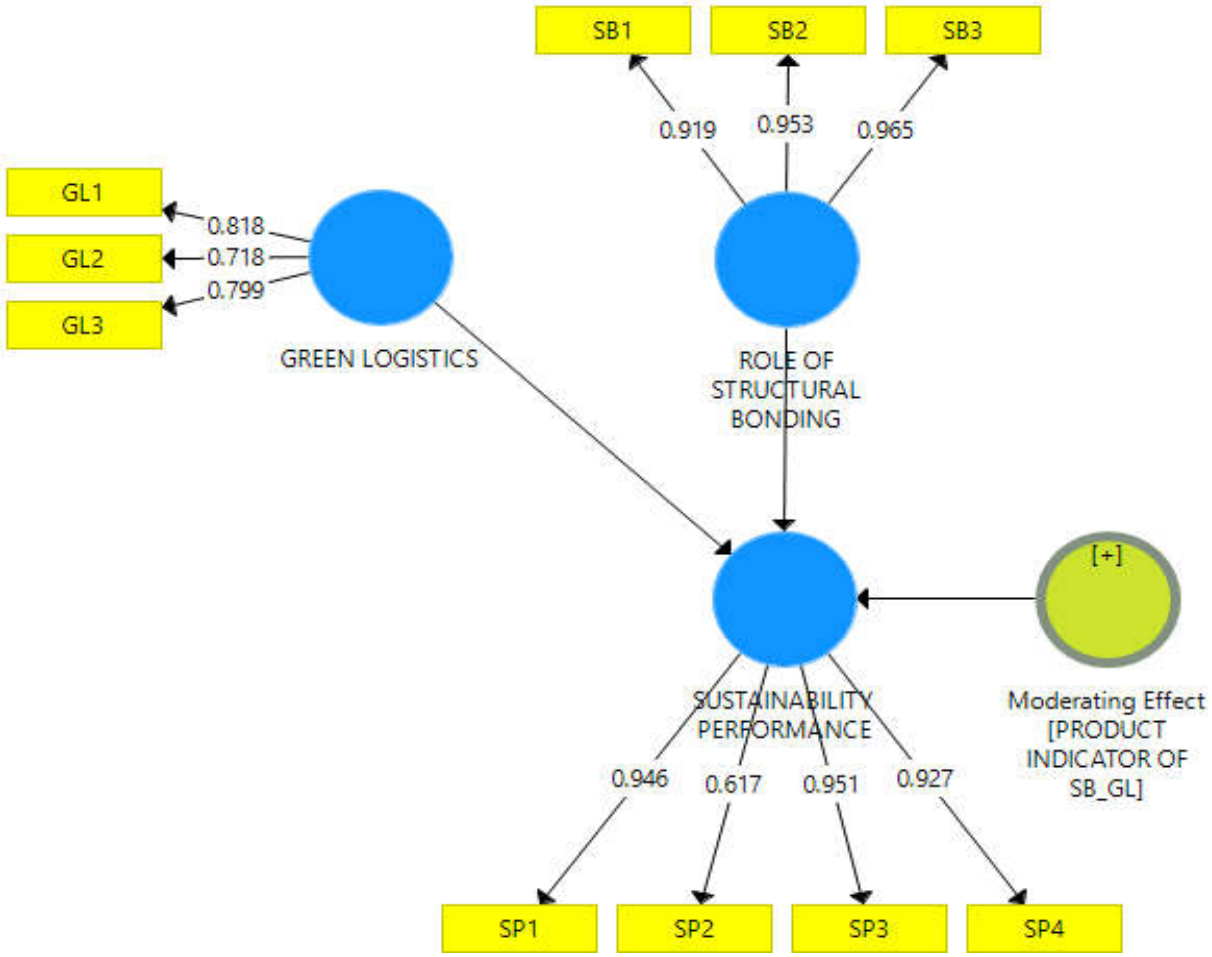

Fig.2. Structural model with SmartPLS 3.0 (factor loading)

This means that all the alternative hypothesis is accepted. For variable interactions between Green Logistics (GL) and Sustainability Performance (SP) obtained the value of T-statistics 2.109 > 1.96, which means that variable the role of structural bonding (SB) is a moderator variable or can moderate the relationships between variables Green Logistics and Sustainability Performance. The relationship is non-linear and quasi-linear can be described a combination of U-curve, seen on the S-Curve can be concluded that the research data comes from respondents that the plot points are not assembled to the right which means that this research data is having an outlier. In the graph visible influence of high point between the point when the GCI-1.81 s. d-1.09, effect moderation not so strong because the value of T-Statistics is not much greater than 1.96 despite significant [31-32, 35, 39]. There has a positive significant impact between Green Logistics (GL) and Sustainability Performance (SP) moderating by the role of Structural Bonding (SB) on Fishery Cold Chain Distributors in Indonesia.

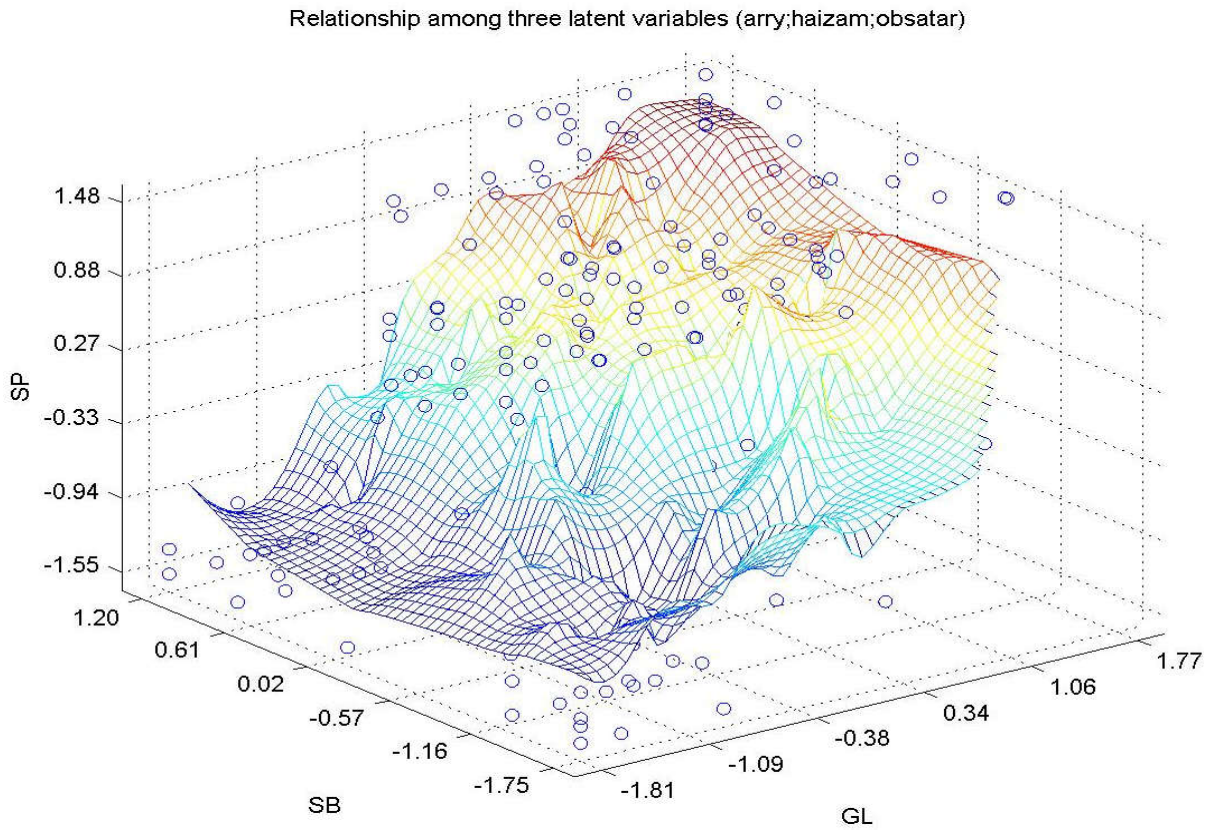

Fig.3. Relationship among latent variables with WarpPLS 5.0 graph

5. CONCLUSION AND RECOMMENDATIONS

This study aims to look at the effect of disclosure sustainability report is seen from the economic, environmental dimension, and social dimensions of corporate performance. This study uses moderator regression analysis (MRA) as an analytical tool hypothesis. Based on the results of hypothesis testing, conclusion that we have Fishery Cold Chain Distributor in Indonesia provide role of Structural Bonding (SB) required to implement green logistics towards sustainability performance. Based on this research, Green Logistics practices means buying eco-friendly materials with sacrificing conventional logistics criteria of quality of goods, the cost and delivery time is not enough. In this research, researcher can provide that role of structural bonding are important to enhancing some of the activities of the GL can be identified from numerous methods to get statistics, provision of information, examine reports or transaction information and provision of products or services to resolve issues.

Government is suggested to force green agenda in the industry, in a top-down approach. Although this result is most undesirable for industrial logistics, it was clear that governmental

intervention and legislation more efficient for use in top companies to intervene in environmental issues. On the environment fish distributor in Indonesia is expected to press the Government apply interest for external costs that arise because of damage to the environment. Price is only one aspect of government intervention. Legislation controlling the movement of hazardous goods, reducing packaging waste and recycled content products. Security truck, driver education, driver in the course of time limits are among the many types of government action that has the potential of impacting on industry logistics. If the top-down approach appears inevitable, in some ways at least, a bottom-up solution would be the preference of the industry. There are several ways a bottom-up approach is likely to occur. Like a reverse logistics, this happens when the business interests of the industry comply with environmental imperatives. With the increasing sophistication of the management and control of IT over scheduling and routing, further gains can be achieved. It can be said that the paradox green logistic permits logistic industry to not significantly become greener. Internal inconsistency between the objective of environmental sustainability and the industries that provide preferences that do not need and air transport can be seen as a thing that can be compromised between the internal and external pressures. But, promoting the logistics industry is an environmental friendly solution for shaping the fish industry's future. In an attempt to examine the existing sustainability process model, this research will propose a build process model. The proposed cold supply chain model will address the issues of sustainability and efficient forward and green supply chain practices. The process model will examine how the sustainability issues can be deal with in an integrated way using green logistics practices in fisheries supply chains. Thus, the proposed research will produce additional role of structural bonding program and contribute significantly on the theoretical aspects of green supply chain practices, sustainability supply chain performance controlling by them. The theoretical contributions of this research lies in fact that the study explores and integrates green supply chain practices and sustainability performance maximizing the economic, social and environmental gains. This adds value to theory, which is lacking in the context of Indonesia’s Fisheries Supply Chain and effect of corporate image. Government, Fisheries Industries and stakeholders can use the model in their policy analyses by looking into the future behaviour of

particular inputs and outputs. Input and output values rely on existing circumstances of capacity, investment, constraints and dynamic policy. Measuring future behaviour in a timely way for various variables is the key to making decisions for better profitability and sustainability. This integrated model can implement in the fisheries supply chain practices in Indonesia at different levels of the supply chain from harvesting until retailing.

6. ACKNOWLEDGEMENTS

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