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Analysis of *Green Finance* , *Excellent Service Quality* (ESQ), and *Corporate Social Responsibility* (CSR), on Hospital Values in Lamongan Regency

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Abstract

Hospital value reflects the quality, benefits, and impacts that the hospital provides to the community, both in terms of health services, operational management, and social contributions. This value can be measured from various indicators, such as medical service quality standards, financial management efficiency, patient satisfaction levels, and roles in improving public health. This study discusses the influence of *green finance* , *excellent service quality* , and *customer social responsibility.* with the aim of assessing the value of hospitals in Lamongan district with the criteria of hospitals that have been accredited as superior . The research method used is a quantitative research method using the SEM PLS analysis tool . The results of the study indicate that *green finance* has a significant effect on hospital value . In addition, *Excellent service quality* also has a significant effect on hospital value, providing insight into quality service on hospital value, and *Customer Social responsibility* has a significant effect on hospital value. Thus, this study contributes to hospital financial management, as well as providing recommendations for hospitals, related agencies, in implementing the results of this study. However, this study has several limitations, which can be a reference for further research.

***Keywords*:** *Green Finance, Excellent Service Quality, Corporate Social Responsibility, Hospital Value*

INTRODUCTION

The health sector is one sector that is directly related to life. society, therefore the provision of health service needs must be prioritized. A hospital is a health service institution for the community with its own characteristics.which is influenced by developments in health science, technological advances and the social and economic life of the community must remain able to improve services. better quality and more affordable for the community in order to achieve the highest level of health. height.

Climate change is a negative result of this phenomenon, this has happened a lot in Indonesia, reported by CNN Indonesia (2021) evidence of climate change includes extreme heat waves, increasing temperatures in Sumatra and Kalimantan by 4°C and reducing rainfall by 12%, droughts. And flood in a number of area, increase water sea in coast, tropical cyclones, and a decline in staple food harvests that if left unchecked will cause a decline in GDP per capita of up to 31%. In 2015, according to Amidjaya & Widagdo (2020) the United

Nations (UN) responded to these natural dynamics by forming a *Sustainable Development Goals* (SDGs) action agenda targeted to be achieved by 2030.

In recent years, the health sector in Indonesia, including in Lamongan Regency, has experienced rapid development driven by the increasing public demand for quality health services. Competition between hospitals is getting tighter, not only in terms of medical facilities, but also in the application of the principles of sustainability and social responsibility. In this modern era, hospitals are not only expected to provide optimal health services, but also to contribute to the welfare of society and the environment through the implementation of *Green Finance* , *Excellent Service Quality* (ESQ), and *Corporate Social Responsibility* (CSR). The current phenomenon shows that hospitals are starting to face challenges in adopting a financial system that is oriented towards sustainability (*Green Finance*). Environmentally friendly financing is a global trend, where health institutions are starting to be directed to manage their operations with the principles of energy efficiency, waste reduction, and investment in green technology. However, not all hospitals in Lamongan have implemented this principle optimally, given the limited resources and managerial awareness of the importance of long-term financial sustainability.

Looking at the quality of service (*Excellent Service Quality*), hospitals in Lamongan continue to strive to improve service standards to meet patient expectations. Several hospitals have implemented technology-based service systems, such as electronic medical records and online queuing systems, to improve patient efficiency and comfort. However, complaints are still found regarding long waiting times, limited medical personnel, and variations in service quality between hospitals that affect patient satisfaction. In addition, the aspect of *Corporate Social Responsibility* (CSR) is also a concern in the health industry. Several hospitals have been active in social activities such as free health services for the underprivileged, health education, and environmental programs. However, there are still hospitals that have not prioritized CSR as part of their development strategy, so that their contribution to the surrounding community is not optimal.

The main problem that arises from this phenomenon is how hospitals can increase their value through the implementation of *Green Finance* , *Excellent Service Quality* , and *Corporate Social Responsibility* in an integrated manner. There is still a gap between the policies that have been designed and the actual implementation in the field, so that hospitals have not fully received the economic, social, and environmental benefits of these concepts. In addition, the lack of empirical research on the relationship between these three factors and hospital value, especially in Lamongan Regency, makes this topic increasingly relevant to be studied further.

In Lamongan district, there has been significant development in the health services sector, marked by an increase in the number and types of hospitals operating in the area. Increase in the Number of Hospitals In 2021, the number of hospitals in Lamongan reached 14 units, including the Muhammadiyah Kalikapas Hospital which was just inaugurated at that time. The Regent of Lamongan, Yuhronur Efendi, hopes that this addition can improve the health standards of the local community.

This development shows Lamongan Regency's commitment to improving the quality and accessibility of health services for its citizens, through the addition of new facilities, improving service status, and responsive handling of health emergencies.

This research was conducted at hospitals in Lamongan Regency , an area that has rapid development in the health sector and faces challenges in improving sustainable health services. Here is a list of hospitals in Lamongan Regency:

Table 1.1

List of All Hospitals in Lamongan Regency

No	Hospital Name	Type	Accreditation Status	Address
1.	Muhammadiyah Hospital Lamongan	B	Plenary	Attorney General Suprapto Street No. 76, Sarirejo, Sukorejo, Lamongan District, Lamongan Regency, East Java 62215
2.	Dr. Soegiri Regional Hospital, Lamongan	B	Plenary	Jl. Kusuma Bangsa No. 7, Beringin, Tumenggungan, Lamongan District, Lamongan Regency, East Java 62214
3.	Fatimah Lamongan Women and Children's Hospital	C	Plenary	Jl. Pahlawan No.18, Sukomulyo, Kec. Lamongan, Lamongan Regency, East Java 62216
4.	Ngimbang Regional Hospital, Lamongan	C	Main	Jl. Tripe – Jombang No.227, Tapas, Sendangrejo, Ngimbang, Lamongan Regency, East Java 62273
5.	Nashrul Ummah Islamic Hospital	C	Main	Jl. Merpati No.62, Lamongan, Sidokumpul, Lamongan District, Lamongan Regency, East Java 62213
6.	Dr. Suyudi Hospital, Lamongan	C	Middle	Jl. Raya Paciran, Paciran, Paciran District, Lamongan Regency, East Java 62264
7.	Mitra Sehat Lamongan Surgical Hospital	C	First Pass	Jl. Raya Lamongan Babat Km. 5 Karanglangit, Blangit, Karangkembang, Babat District, Lamongan Regency, East Java 62218

8.	Citra Medika Hospital, Lamongan	C	First Pass	Jl. Lamongrejo No.28, Jetis, Lamongan District, Lamongan Regency, East Java 62211
9.	Muhammadiyah Hospital Babat Lamongan	D	Plenary	Jl. KH. Ahmad Dahlan No.14, Banaran, Babat, Babat District, Lamongan Regency, East Java 62271
10.	Intan Medika Hospital, Lamongan	D	Middle	Nearby Street – Karangbinangun, Blawi, Karangbinangun District, Lamongan Regency, East Java 62293
11.	Abdurrahman Syamsuri Hospital (Arsy) Lamongan	D	First Pass	Jl. Raya Deandles No.Km.74, Paciran, Paciran District, Lamongan Regency, East Java 62264

Source : https://lamongankab.bps.go.id/

Based on the table above, there are 14 hospitals in Lamongan Regency, of which 4 hospitals have been fully accredited. From these data, the researcher determined 4 research samples which will then be taken from hospitals that have been fully accredited from all hospitals in Lamongan, including Muhammadiyah Hospital Lamongan, Soegiri Regional General Hospital, Fatimah Mother and Child Hospital, Muhammadiyah Babat Hospital Lamongan.

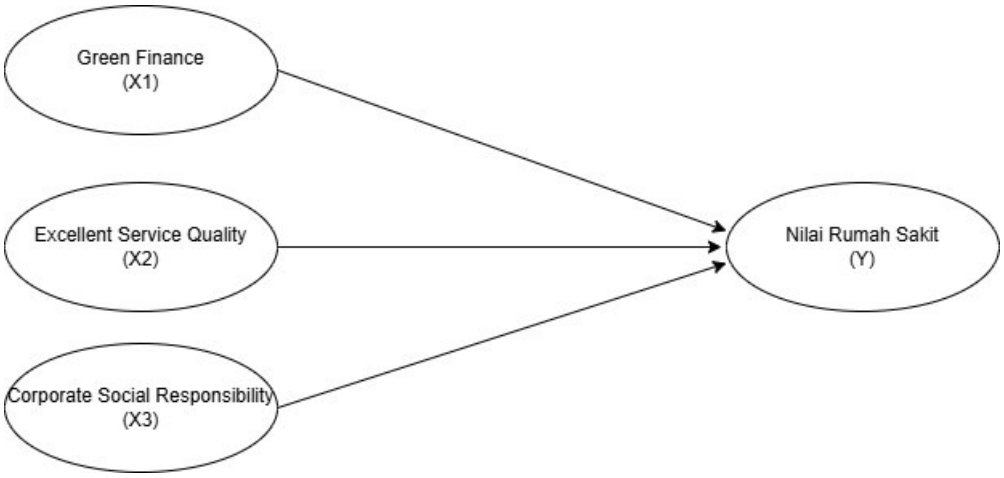
The focus of this study is to analyze the Value of Hospitals in Lamongan Regency that have been fully accredited using Green Finance, Excellent Service Quality and Corporate Social Responsibility (CSR) as independent variables.

Green Finance is a sustainability-based financial strategy that aims to optimize hospital performance while maintaining environmental balance. The implementation of green finance in hospitals can encourage efficiency in the use of resources and create environmentally friendly service innovations [i].

Excellent Service Quality is a key element in improving patient experience, satisfaction, and loyalty which ultimately impacts the value of the hospital, where the definition of *Excellent Service Quality* or service is the best service provided to customers, this service must meet the predetermined quality standards. [1] .

According to Tan, Y., Lin, B. & Wang, L (2025) in their research , *Corporate Social Responsibility* (CSR) is an increasingly important concept in the business world, including in the health service sector such as hospitals . CSR in hospitals is not only related to social responsibility towards patients, but also includes aspects of environmental sustainability, employee welfare, and relationships with the surrounding community.

Framework of thinking



METHOD

The research location chosen by the researcher is in Lamongan Regency. The population in this study were the Head of Department or Head of Section in each department of four hospitals in Lamongan Regency that have been fully accredited . According to Sugiyono (2016: 13) quantitative research is a quantitative research method that can be interpreted as a research method based on the philosophy of positivism, used to research a certain population or sample, sampling techniques are generally carried out randomly, data collection using research instruments, data analysis is quantitative/statistical with the aim of testing the established hypothesis.

The research method used in this study is a quantitative approach. This study used 271 respondents. Sampling in this study used the Purposive sampling technique , This method is also known as judgmental sampling or selective sampling where researchers choose samples based on the assessment that the sample is in accordance with the research objectives more effectively with a smaller sample size and a more homogeneous population. .

Determination of the number of samples is determined by using the Margin of Error formula (Arikunto, 2019 : 75), as :

$$n = \frac{Z^2}{4(moe)^2}$$

Information :

n = amount sample

Z = level of confidence required in determining the sample 90% So the value of Z is 1.645

Moe = *Margin of error* , that is level error maximum Which

can be tolerated, and in this study the Moe used was 5 %.

Based on the calculations above, the following is obtained:

$$n = \frac{(1{,}645)^2}{4(5\%)^2}$$

$$n = \frac{2.706025}{0.01}$$

$$= 270.60 = 271$$

Based on the calculation above, the number of samples studied can be obtained as much as 270.60, or rounded up to 271 respondents, because if the number of populations represented is greater, the statistics will be better. Thus, the number of samples used for this study is 271 respondents consisting of department heads in the four hospitals .

Data processing in this study used smartPLS SEM (Partial Least Square - Structural Equation Modeling) Software. PLS is able to explain the relationship between variables and perform analyzes in one test. The purpose of PLS is to help researchers confirm the theory and to explain whether or not there is a relationship between latent variables. According to Imam Ghozali (2019 : 417) the PLS method is able to describe latent variables (not directly measurable) and are measured using indicators. The author uses Partial Least Square because this study is a latent variable that can be measured based on its indicators so that the author can analyze it with clear and detailed calculations . The presentation of data in this study is presented in the form of tables and images to make it more systematic in understanding .

RESULTS AND DISCUSSION

In this chapter on data analysis and discussion, the SEM-PLS analysis method is used to determine the structural relationship between variables. *Green Finance, Excellent Service Quality (ESQ),* and *Corporate Social Responsibility (CSR),* towards Hospital Value.

1) Outer Loading Test Results

The test was conducted using SmartPLS software. The outer model in this study can be seen in the following figure:

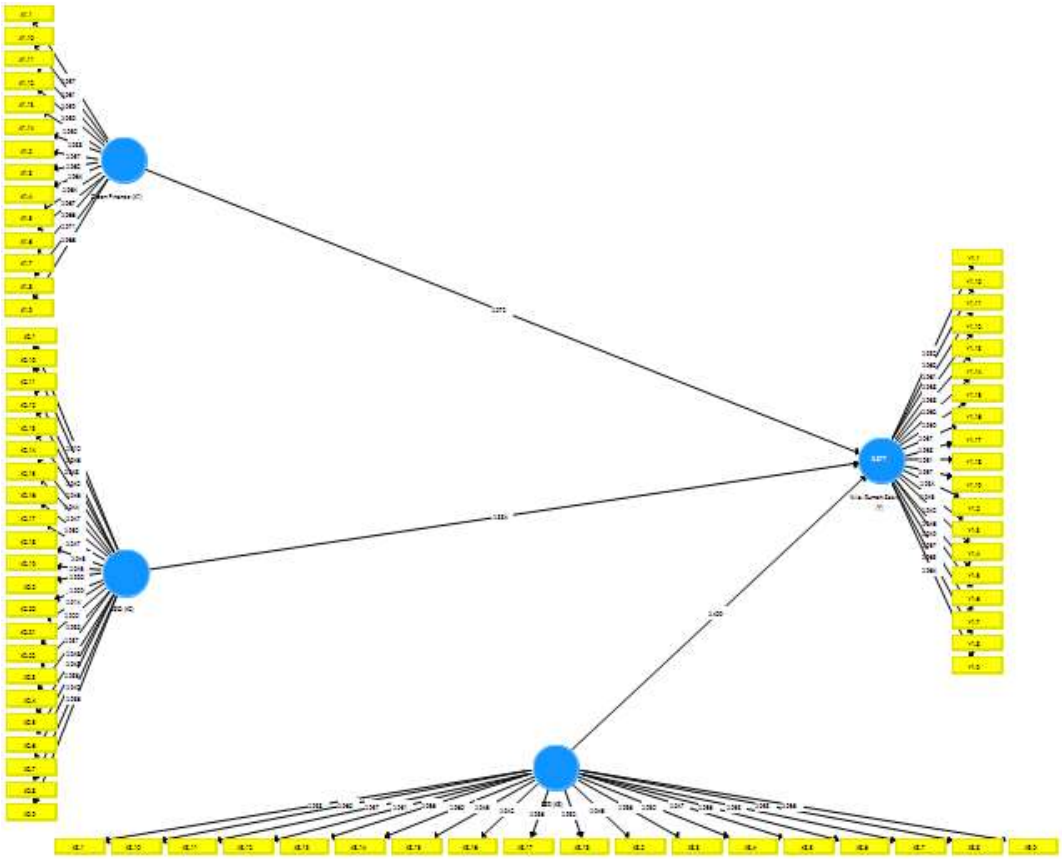


Figure 1 Outer Model Test Results using SmartPLS

Table 1 Outer Loading Test Results

	CSR (X3)	ESQ (X2)	Green Finance (X1)	Hospital Value (Y)
X1.1			0.957	
X1.10			0.961	
X1.11			0.959	
X1.12			0.950	
X1.13			0.950	
X1.14			0.938	
X1.2			0.957	
X1.3			0.962	
X1.4			0.964	
X1.5			0.964	
X1.6			0.967	
X1.7			0.966	
X1.8			0.971	
X1.9			0.966	

X2.1		0.910		
X2.10		0.946		
X2.11		0.948		
X2.12		0.942		
X2.13		0.946		
X2.14		0.944		
X2.15		0.947		
X2.16		0.952		
X2.17		0.947		
X2.18		0.945		
X2.19		0.945		
X2.2		0.920		
X2.20		0.929		
X2.21		0.914		
X2.22		0.920		
X2.3		0.930		
X2.4		0.937		
X2.5		0.943		
X2.6		0.948		
X2.7		0.936		
X2.8		0.942		
X2.9		0.936		
X3.1	0.933			
X3.10	0.960			
X3.11	0.957			
X3.12	0.951			
X3.13	0.956			
X3.14	0.960			
X3.15	0.946			
X3.16	0.942			
X3.17	0.936			
X3.18	0.932			
X3.2	0.946			
X3.3	0.936			
X3.4	0.930			
X3.5	0.947			
X3.6	0.956			
X3.7	0.953			
X3.8	0.953			
X3.9	0.956			
Y1.1				0.932

Y1.10				**0.962**
Y1.11				**0.961**
Y1.12				**0.958**
Y1.13				**0.958**
Y1.14				**0.962**
Y1.15				**0.959**
Y1.16				**0.957**
Y1.17				**0.958**
Y1.18				**0.951**
Y1.19				**0.957**
Y1.2				**0.934**
Y1.3				**0.945**
Y1.4				**0.942**
Y1.5				**0.946**
Y1.6				**0.949**
Y1.7				**0.957**
Y1.8				**0.963**
Y1.9				**0.964**

Source: Primary Data, Processed Using Smart PLS

Figure 1. above shows the relationship between exogenous and endogenous variables between indicators in each variable with the research variables and the relationship between *Green Finance variables.* to Hospital Value in Lamongan Regency. In the evaluation of the measurement model (outer model) there are several things that need to be considered, namely:

a. Loading Factor The convergent validity test will be fulfilled if the loading factor value on each indicator is > 0.7. Based on the image above, the results of the convergent validity test of all indicators in the study conducted show that all indicators used are valid because they have a loading factor value of > 0.7. Therefore, all indicators used in this study have met the convergent validity requirements. b) Composite Reliability The reliability test is carried out by looking at the composite reliability and Cronbach alpha values contained in each variable. The values that must be met for each variable to be declared reliable are > 0.7 for the composite reliability value and > 0.7 for the Cronbach alpha value.
b. Composite Reliability Reliability testing is done by looking at the composite reliability and Cronbach alpha values contained in each variable. The values that must be met so that each variable is declared reliable are > 0.7 for the composite reliability value and > 0.7 for the Cronbach alpha value.
c. Average Variance Extracted (AVE) Indicator is said to be Valid if the AVE value > 0.5. AVE (Average Variance Extracted) is used as a form of testing to support the discriminant validity test.

Table 2 Construct Validity and Reliability Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CSR (X3)	0.993	0.993	0.994	0.897
ESQ (X2)	0.993	0.993	0.994	0.879
Green Finance (X1)	0.993	0.993	0.994	0.921
Hospital Value (Y)	0.994	0.994	0.995	0.909

Source: Primary Data, Processed Using Smart PLS

Based on Table 2. in each variable *Green Finance* , *Excellent Service Quality* , *Customer Social Responsibility* and the overall Hospital Value has a Cronbach alpha value > 0.70, which means that the variables in this study meet the criteria of composite reliability supported by the Cronbach alpha test and it is stated that all variables are reliable.

Based on Table 2, each variable is *Green Finance* , *Excellent Service Quality* , *Customer Social Responsibility* and the overall Hospital Score has a composite reliability value of > 0.7, so the variables used in this research are declared reliable.

Based on Table 2, each variable is *Green Finance* , *Excellent Service Quality* , *Customer Social Responsibility* and the overall Hospital Value has an AVE value > 0.5, so that the variables in this study are declared valid and meet the discriminant validity criteria.

Table 3 ***Cross Loading Test Results***

	CSR (X3)	ESQ (X2)	Green Finance (X1)	Hospital Value (Y)
X1.1	0.734	0.754	0.957	0.816
X1.10	0.745	0.746	0.961	0.812
X1.11	0.758	0.743	0.959	0.816
X1.12	0.714	0.732	0.950	0.783
X1.13	0.763	0.763	0.950	0.822
X1.14	0.719	0.736	0.938	0.788
X1.2	0.728	0.748	0.957	0.812
X1.3	0.733	0.753	0.962	0.816
X1.4	0.724	0.736	0.964	0.807
X1.5	0.744	0.763	0.964	0.824
X1.6	0.715	0.744	0.967	0.799
X1.7	0.732	0.743	0.966	0.816
X1.8	0.730	0.750	0.971	0.814
X1.9	0.737	0.750	0.966	0.821
X2.1	0.743	0.910	0.779	0.813
X2.10	0.732	0.946	0.728	0.808
X2.11	0.738	0.948	0.733	0.814

X2.12	0.725	0.942	0.725	0.803
X2.13	0.738	0.946	0.736	0.815
X2.14	0.734	0.944	0.733	0.812
X2.15	0.727	0.947	0.728	0.814
X2.16	0.735	0.952	0.733	0.821
X2.17	0.719	0.947	0.728	0.814
X2.18	0.726	0.945	0.722	0.808
X2.19	0.728	0.945	0.730	0.817
X2.2	0.732	0.920	0.756	0.811
X2.20	0.723	0.929	0.717	0.802
X2.21	0.743	0.914	0.708	0.794
X2.22	0.753	0.920	0.719	0.806
X2.3	0.712	0.930	0.747	0.810
X2.4	0.729	0.937	0.745	0.824
X2.5	0.725	0.943	0.735	0.821
X2.6	0.732	0.948	0.724	0.826
X2.7	0.708	0.936	0.705	0.796
X2.8	0.733	0.942	0.715	0.801
X2.9	0.730	0.936	0.720	0.799
X3.1	0.933	0.736	0.715	0.823
X3.10	0.960	0.749	0.728	0.830
X3.11	0.957	0.746	0.717	0.818
X3.12	0.951	0.731	0.703	0.805
X3.13	0.956	0.749	0.719	0.832
X3.14	0.960	0.759	0.718	0.841
X3.15	0.946	0.737	0.699	0.821
X3.16	0.942	0.737	0.717	0.835
X3.17	0.936	0.745	0.725	0.852
X3.18	0.932	0.730	0.728	0.859
X3.2	0.946	0.747	0.733	0.843
X3.3	0.936	0.723	0.716	0.815
X3.4	0.930	0.726	0.731	0.813
X3.5	0.947	0.730	0.747	0.830
X3.6	0.956	0.745	0.765	0.852
X3.7	0.953	0.727	0.730	0.832
X3.8	0.953	0.719	0.725	0.818
X3.9	0.956	0.737	0.725	0.827
Y1.1	0.831	0.801	0.795	0.932
Y1.10	0.830	0.823	0.797	0.962
Y1.11	0.830	0.823	0.805	0.961
Y1.12	0.815	0.818	0.800	0.958

Y1.13	0.829	0.823	0.805	0.958
Y1.14	0.861	0.838	0.818	0.962
Y1.15	0.852	0.844	0.823	0.959
Y1.16	0.842	0.835	0.814	0.957
Y1.17	0.844	0.836	0.816	0.958
Y1.18	0.852	0.835	0.814	0.951
Y1.19	0.864	0.856	0.833	0.957
Y1.2	0.824	0.798	0.783	0.934
Y1.3	0.837	0.816	0.809	0.945
Y1.4	0.829	0.800	0.793	0.942
Y1.5	0.830	0.804	0.788	0.946
Y1.6	0.832	0.808	0.791	0.949
Y1.7	0.817	0.816	0.790	0.957
Y1.8	0.839	0.841	0.813	0.963
Y1.9	0.827	0.837	0.816	0.964

Source: Primary Data, Processed Using Smart PLS – 3

Based on Table 3. above, the *cross loading value* on each item has a greater value when connected with cross loading to other constructs. This shows that each indicator is appropriate to explain the construct of each variable and proves that the discriminant validity of all items is valid.

Structural Model Test Results (inner Model) The inner model test was conducted to determine the Structural Model Test Results (inner Model) The inner model test was conducted to determine the relationship between constructs, significance values and R^2 of the research model conducted.

2) Structural Model Test Results (inner Model)

Table 4 R -Square Test (R^2)

	R Square	R Square Adjusted
Hospital Value (Y)	0.877	0.876

Source: Primary Data, Processed Using Smart PLS – 3

Based on the R square table above, it can be concluded that the variation of the hospital value variable can be explained by the Green Finance, *Excellent Service Quality* (ESQ) and *Customer Social Responsibility* (CSR) variables of 0.877% and the rest is explained by other variables outside the variables in this study.

3) Hypothesis Testing

To see whether a hypothesis can be accepted or rejected, among others, by considering the significance value between constructs, t statistics and P values. In the bootstrapping method in this study, the significance value used (two-tailed) t-value is 1.96 (significance level = 5%) with the provision that the t statistic value must be greater than 1.96.

Table 5 Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
CSR (X3) -> Hospital Value (Y)	0.409	0.407	0.056	7.245	**0.000**
ESQ (X2) -> Hospital Value (Y)	0.334	0.330	0.059	5,661	**0.000**
Green Finance (X1) -> Hospital Value (Y)	0.272	0.277	0.060	4,562	**0.000**

Source: Primary Data, Processed Using Smart PLS

Based on Table 6. above, through the processed results of bootstrapping hypothesis test data using SmartPLS 3, it can be described as follows:

a. The influence *of Customer Social Responsibility* on hospital value obtained a t statistic value of 7.245 > 1.96 and P values 0.000 < 0.05. Thus the research hypothesis **is accepted** .
b. The influence of *excellent service quality* on hospital value obtained a t statistic value of 5.661 > 1.96 and P values 0.000 < 0.05. Thus the research hypothesis **is accepted** .
c. The influence of *Green Finance* on hospital value obtained a t statistic value of 4.562 > 1.96 and P values 0.000 < 0.05. Thus the research hypothesis **is accepted** .

CONCLUSION

Based on the results of the research conducted, it can be concluded that the implementation of *green accounting* , *Excellent Service Quality* (ESQ), and *Customer Social Responsibility* (CSR) have a significant effect on the Value of Hospitals in Lamongan Regency . The implementation of good environmental financial management can improve operational efficiency and create added value for hospitals , as well as strengthen the image of hospitals in the eyes of the public and stakeholders. In addition, the results of the analysis show that hospital awareness of social and environmental responsibility is an important factor in encouraging the adoption of *green finance* . Thus, hospitals are advised to continue to develop sustainable policies and integrate environmental aspects into financial reporting in order to achieve optimal and sustainable performance.

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