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EFFECT OF PRODUCTION COSTS, AND DISTRIBUTION COSTS ON TURNOVER SALES (Case Study aat PT Sandana Istana Multigas)

Dumadi*[1], Sugiani[2], Anisa Sains Kharisma[3], Nur Afrida[4], Hilda Kumala Wulandari[5]
[1,2,3,4,5] Faculty of Economics and Bussines, Muhadi Setiabudi University, Brebes, Indonesia

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ABSTRACT

This study aims to determine and analyze the effect of production costs and distribution costs on sales turnover at PT Sandana Istana Multigas. This study used secondary data. The population in this study is bookkeeping related to production costs, distribution costs and sales turnover at PT Sandana Istana Multigas, Tegal City. The sample in this study is the bookkeeping report of PT Sandana Istana Multigas for the period 2017 to 2019. Hypothesis testing uses descriptive analysis, normality test, heterochedasticity test, multicholinearity test, and multiple regression test. Data analysis is assisted with the SPSS application. The results of this study show that production costs have a negative and significant effect on sales turnover, distribution costs have a positive and significant effect on sales turnover, production costs and distribution costs simultaneously have a positive and significant effect on sales turnover.

E-mail:
[1]dumadi_adi@yahoo.co.id.,
[2]sugiani@gmail.com,
[3]anisasains08@gmail.com,
[4]nurafridah.umus73@gmail.com,
[5]hilda060791@gmail.com

1. INTRODUCTION

In general, a company has a goal or target to be achieved. One of them is to get a high sales turnover by minimizing expenses that occur in the production process (Indah Dewi Mulyani, 2022). Sales turnover is often used as a measuring tool to assess a company's performance (Syaifulloh et al., 2021). One of the elements that are part ofdetermining sales turnover is costs. Cost is one of the most important sources of information in determining sales turnover. The cost determination process can describe a company's performance in the future. PT Sandana Istana Multigas (SIM), Tegal City is a manufacturing company with a business scope selling medical and industrial gases including oxygenmedical and other industrial gases. As a subsidiary of PT Samator, PTSIM uses the SAP program. This is used as a basis for reporting and monitoring activities at the branch office so thatit can be directly supervised by the head office.

The SAP program makes it easier for PT SIM, Tegal City to manage information. One of them is in the sales department. Starting from receiving ordered goods from customers by salesmen, making Delivery Orders (DO), preparing orders, making travel documents, shipping and billing and controlling all processes. The ease of processing information through the computerization of the SAP program will certainly affect the determination of the sales turnover that the company wants to achieve (Wulandari et al., 2022). Problems arise if the determination of production costs and distribution costs is not correct. This has resulted in sales turnover not running according to the targets set by the company.

Sales turnover is the total number of sales of a product in a certain time, which is calculated based on the amount of money received (Judge, 2017). The factors that affect the size of the turnover are divided into two factors, namely:

a. Internal factors (factors controlled by the company's parties) include: the company's ability to manage the products to be marketed, the price and promotion policies outlined by the company and the policy to chooseintermediaries used.
b. External factors (factors that cannot be controlled by the company) include: economic and trade developments both nationally and internationally, government policies in the economic, trade and monetaryfields and an atmosphere of market competition (Kurniawan, 2018).

Production costs are costs related to the manufacture of goods and the provision of services (Jannah, 2018). Production costs are the costs of production itself including all costs associated with

obtaining or manufacturing a product (Wijaya & Syafitri, 2011). Production costs based on the time period are distinguished into short-term production costs and long-term production costs. Short-run production costs are derived from the short-run production function, characterized by the presence of fixed costs.

Long-term production costs costs that can be adjusted for certain production levels (Dumadi & Hutapea, 2021). Production costs can be defined as costs associated with all activities, starting from when the goods have been purchased/produced until the goods arrive at the customer's place (Syukriadi, 2016). According to Adiyoso in (Prihantara et al., 2015) distribution costs are costs incurred to market or ship a product. Distributioncosts are costs incurred by companies to market goods or deliver goods to the market. (Widnyana et al., 2014).Distribution costs are costs that include all costs incurred from the time the product is finished being produced and stored in the warehouse until the product is converted into cash (Tyas, 2016).

Production costs are costs incurred in connection with the processing of raw materials into finished goods (Rustami et al., 2014). Elements of production costs include:

a. Raw material costs
   Raw materials are materials that make up the entire finished product. Raw materials processed in manufacturing companies can be obtained from local purchases, imports or from self-processing.
b. Direct labor costs
   Direct labor costs are one of the elements of the cost of products, therefore labor costs are needed in determiningthe cost of goods per unit.
c. Factory overhead costs
   Factory overhead costs are indirect factory costs during the coming period Wijaya & Syafitri, (2011).

According to Adiyoso, distribution costs are costs that are sacrificed for marketing activities or product delivery (Triwibowo, 2019). Sales turnover is sales revenue earned within a certain period of time. Distribution costs are costs incurred by companies to distribute goods or services to consumers, which includes transportation costs (Study & Sharia, 2019). Production costs and distribution costs in a company greatly affectthe volume in determining sales turnover. Companies need to determine the right production costs and distribution costs so that consumers want to buy or use the products produced by the company, so that the company gets sales turnover in accordance with what the company wants. The determination of production costs and distribution costs requires various integrated considerations. From production costs, promotion costs, operational costs, distribution costs, turnover targets to be achieved and much more (Ariyani et al., 2022). Therefore, cost determinants will be carefully considered by the company. The cost policy chosen by the company will directly affect the success or failure of the company in achieving its goals (Indah Dewi Mulyani, 2022).

Basically distribution is the activity of delivering products from the hands of producers to consumers or customers in good condition, on time and in accordance with the wishes of the buyer (Rachman & Yuningsih, 2016). According to Tjiptono, distribution channels can be interpreted as marketing activities that seek to expedite and facilitate the delivery of goods and services from producers to consumers, so that their use is in accordance with what is being expanded (type, quantity, price, place and when needed) (Afif & Krisdianto, 2020). Gun Gunawan Rachman's research results (2016) that distribution costs and distribution channels have a 96.7% influence on sales volume (Rachman & Yuningsih, 2016). Distribution channels are divided into two, namely direct distribution channels and indirect distribution channels. What is meant by direct distribution channels are channels that directly connect producers with end consumers/users without intermediaries, while indirect distribution channels are channels that use one or more intermediaries (Indriani, 2018).

Based on the background of the problems above, several problems that are relevant to the research can be identified as follows: a) Do production costs affect sales turnover at PT Sandana Istana Multigas?, b)Do distribution costs affect sales turnover at PT Sandana Istana Multigas? , c) Do production costs and distribution costs have an effect on sales turnover? The purpose of the study is to determine the effect of production costs and distribution costson sales turnover.

2. METHOD

A quantitative approach was used in this study. The quantitative method is a research methodologybased on the philosophy of positivism, used to research certain populations or samples, data analysis is quantitative and to test established hypotheses (Syahza, 2021). The research conducted is *field research,* namely research conducted in real life. This type of research is in the form of field research by taking a research object at PT Sandana Istana Multigas. Population is an object or subject that has

certain characteristics that will be used or concerned by researchers in an observation or research to be studied and conclusions drawn by researchers (Rahmat, 2009). The sample is part of the number and characteristics possessed by the population (Zuchri Abdussamad, 2021). If the population is large,and it is not possible for the researcher to study everything in the population, for example due to limited funds, manpower and time, the researcher can take or use samples from that population. What is learned from the sample, the conclusions will be applied to the population. For this reason, samples taken from the population must be truly representative. The sampling method used is to use the *probability sampling* method with a *purposive sampling technique* where the sample determination method is based on certain criteria (Usvita, 2017). Objects or subjects that can be people, agencies, objects and so on. The location of this research was conducted in East Tegal District, Tegal City, while the respondents of this study were PT Sandana Istana Multigas.

Sources of data used in this study are primary and secondary data. Primary data is a source of research data obtained directly from the research object. In this study primary data is the result of research conducted directly to respondents in the field, in order to obtain data using observation, documentation and questionnaires. Secondary data is data in the form of available data that can be obtained by researchers. In this study, secondary data is data obtained through journals and information obtained directly from the research location. The data collection technique used in this study was by using observation, interview, and documentation techniques, regarding production costs and distribution costs incurred every month, as well as the sales turnover obtained.

The classic assumption test used in instrument testing is the normality test, multicollinearity test, and heteroscedasticity (Setiawati, 2021). The normality test is a test conducted to find out whether the residual values have a normal distribution or not. The way to detect whether the residuals are normally distributed or not is by using the non-parametric Kolmogorov-Smirnov (KS) statistical test. The multicollinearity test aims to test whether in the regression model a strong correlation is found between the independent (independent) variables. Multicollinearity can be seen from the Tolerance and Variance Inflation Factor (VIF) values. A low tolerance value is the same as a high VIF value (because VIF = 1/tolerance). The cut-off value that is commonly used to indicate the existence of multicollinearity is a tolerance value of <0.10 or the same as the VIF value of 10. The heteroscedasticity test is used to test whether the formed regression model has an inequality of variance from the residual regression model. If the variance from the residual of one observation to another observation remains, then it is called homoscedasticity and if it is different it is called heteroscedasticity. A good regression model is one that has homoscedasticity or does not have heteroscedasticity. to detect whether there is heteroscedasticity, it is done by looking at the graph plot between the predicted value of the dependent variable (ZPRED) and the residual (SRESID) (Setiawati, 2021).

To test the hypothesis used multiple regression analysis. This test was conducted to see the effect of the independent variables on the dependent variable as a whole. This test was conducted to compare the significance level with the value of ÿ (5%) at the 5% degree level. The conclusion is taken by looking at the sig ÿ value (5%) provided that if the value of Sig. < ÿ then H0 is rejected, and if the Sig value > ÿ then H0 is accepted (Zuchri Abdussamad, 2021). This partial test (t test) is used to see the independent effect individuallyon the dependent variable by assuming other variables are constant. The conclusion is taken by looking at the significance value compared to the value of ÿ (5%) provided that if the value of Sig. < ÿ then H0 is rejected, andif the Sig. > ÿ then H0 is accepted (Zuchri Abdussamad, 2021). The coefficient of determination (R2) is used to measure how well the regression line matches the actual data *(goodness of fit).* The value of the coefficient of determination is between zero and one. The small R2 value means that the ability of the independent variablesto explain the variation in the dependent variable is very limited. Values that are close to one mean that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

The general goal of a company setting up a business is to obtain sales turnover. Sales turnover is the difference between revenue and costs incurred by a company in a certain period. Sales turnover can be used to show a picture of the company's performance during a certain period. From the sales turnover obtained, it can be used as an indicator to assess the extent to which management is managing the company. Based on previous research reviews and theoreticalreviews and background problems, the framework can be described as follows:

Figure 1. Thinking Framework

3. RESULT AND DISCUSSION

Descriptive analysis is an analysis used to analyze data by describing/describing the data that has been collected as it is without intending to make a generally accepted conclusion or generalization (Sugiyono, 2018). Descriptive statistics are used to display the mean is the average of the data, the median is the middle value (or the average of the two middle values if the data is even), the maximum and minimum are the largest and smallest values ofthe data, the standard deviation is a measure of dispersion or dispersion data (Sugiyono, 2018). The variables used in this study include production costs, distribution costs and sales turnover at PT Sandana Istana Multigas from 2017 to 2019 as the dependent variable. These variables will be displayed statistically descriptive as shown in table 2 below.

Table 1. Descriptive Statistics Test

Descriptive Statictics					
	N	Minimum	Maximum	Mean	Std. Deviation
Produktion Age	36	10000000	42000000	24819444.44	9449227.314
Distribution Cost	36	19000000	76000000	58189460.72	7694349.128
Sales Turnover	36	428809420	11081545896	734241681.6	1418719114.9
Valid N (listwise)	36				

The independent variables of this research are production costs and distribution costs. The results of the descriptive statistics in table 2 show that the production cost variable has a minimum value of Rp. 10,000,000 and a maximum price of Rp. 42,000,000 with an average cost of Rp. 24,819,444.44 while the standard deviation is 9,449,227.314. The results of the descriptive statistics in table 2 show that the distribution cost variable has a minimum value of Rp. 49,000,000 and a maximum distribution cost of Rp. 76,000,000 with an average distribution cost of Rp.58,189,460.72 while the standard deviation is 7,694,349.128.

The dependent variable of this research is sales turnover. The results of the descriptive statistics in table 2 show that the sales turnover variable has a minimum value of Rp. 428,809,420 and a maximum price of Rp. 1,081,545,896 with an average price of Rp. 734,241,681.58 while the standard deviation is 141,871,914.93. The classical assumption test is carried out using regression analysis of the independent variables and the dependent variable. The classic assumption test in this study consists of a normality test, multicollinearity test, and heteroscedasticity test.

A data is said to follow a normal distribution seen from the distribution of data on the diagonal axis of the graph(Ghozali, 2016).

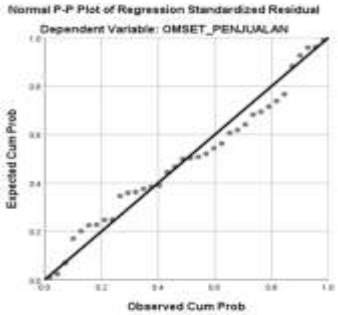

Figure 2. Normal PP Plot

In Figure 1 it can be seen that the points on the normal plot graph spread at -3.044 < t table 3.332 and a significant value of 0.005 < 0.05.

a. Distribution costs have a positive and significant effect on sales turnover with a calculated t value of 4.732 > t table of 3.332 and a significant value of 0.000> 0.05
b. Production costs and distribution costs simultaneously have a positive and significant effect on turnoversales with a value of 12.380 > F table 3.28 and a significant F level of 0.000> 0.05.

4. CONCLUSION

This research was conducted to examine the effect of production costs and distribution costs on Sales Turnover. Based on the results of the research that has been done, it can be concluded as follows: Production costs have a negative and significant effect on sales turnover with a t-value of -3.044 < t-table 3.332 and a significant value of 0.005 <0.05.

Distribution costs have a positive and significant effect on sales turnover with a t count value of 4.732 > t table of 3.332 and a significant value of 0.000> 0.05. Production costs and distribution costs simultaneously have a positive and significant effect on sales turnover with a value of 12.380> F table 3.28 and a significant F level of 0.000> 0.05.

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