

Analysis of Business Management Regional Public Company (Perumda) Drinking Water in Jambi Province

Moh Ihsan, H M Rachmad R, Rike Setiawati, Zamzami

Abstract: This study aims to analyze the economic factors of management on company performance of the Regional Public Company (PERUMDA) Drinking Water in Jambi Province. Determination and selection of this research sample using purposive sampling technique using certain criteria. The selection criteria consisted of PERUMDAM (public regional drinking water company) in Jambi Province, PERUMDAM which had consecutive financial data for the 2016-2020 period. The sample of this research is 9 PERUMDAM in Jambi Province. Data analysis was performed using quantitative descriptive statistics and observations. The analysis used is Multiple Regression Analysis of Panel Data with the help of Eviews Software, The results of the study explain that based on the results of the Multiple Regression Analysis of Panel Data, it shows that economic factors that affect PERUMDAM's management in Jambi Province, Market Share and Employe Cost has a negative significant effect on PERUMDAM's Business Management in Jambi Province, Water Selling Price, Number of Customer and General Adminitration Cost has a positive and significant effect on PERUMDAM Business Management in Jambi Province

Keywords: PERUMDAM; Business Management; Economic Factor.

I. INTRODUCTION

Indonesia is committed to the successful implementation of the Sustainable Development Goals (SDGs) by achieving the 2030 development agenda. In this case, Presidential Regulation no. 59/2017 regarding the implementation of TPB achievements in Indonesia has mandated the Minister of National Development Planning to prepare a Map Indonesia's Sustainable Development Goals Road. The TPB Indonesia Roadmap was developed through a

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lengthy process and discussion involving the participation of various stakeholders, ensuring that the contents of this roadmap reflect the aspirations of various stakeholders. This roadmap contains problems and projections of the main indicators of each goal in TPB, including progressive policies in achieving TPB targets. There are about 60 indicators included in this roadmap. The results of the projected scenarios and policy intervention scenarios from each indicator clearly show that achieving each target requires strong collaboration and collaboration between stakeholders as well as joint commitments both in implementing program activities and financing the achievement of the 2030 development agenda [1].

The fifth and sixth Nawacita carry the mission of "realizing a high quality of life for Indonesian people, advanced and prosperous, and creating a competitive nation". To realize this noble mission, in the 2015-2019 National Medium Term Development Plan (RPJMN), the Government targets universal access of 100 percent for access to drinking water and proper sanitation in order to ensure the fulfillment of the basic needs of every citizen. The logical follow-up was the establishment of a program of 10 million low-cost connections. This is also in line with the sixth target of the Sustainable Development Goals (SDGs), namely clean water with guaranteed availability and sustainability where water meets the 4K principles, namely Quality, Quantity, Continuity, and Affordability [2].

The income gap between regions is a problem that has been continuously pursued before. Without equity, development will not be enjoyed by all Indonesian people. In an effort to achieve equity, there needs to be strategic efforts, especially on crucial matters such as education, health, clean water, sanitation, electricity, and infrastructure. At present, the water problem is no longer considered a simple problem, but an important problem that must be faced together, considering that the water problem is an international problem. The existence of water as an economic commodity was first declared at the International Conference on Water and Environment in Dublin in 1992, but until now the debate between water as a pure private good or a public good has not reached an agreement.

Access to drinking water and basic services is a national priority and it is closely related to other development issues such as health, poverty, and human development.

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Open defecation and untreated wastewater contaminate water supplies and are a source of spread of diarrheal diseases as well as cholera.

One in four children under five in Indonesia has diarrhea, which is the main cause of under-five mortality (UNICEF, 2018). In 2018, 30.8% of children under five also experienced stunting [3].

Robust interventions, such as the provision of drinking water, can contribute as much as 70% to stunting prevention. • Access to adequate drinking water sources has increased from year to year. In 2018, 87.75% of the population had access to proper drinking water sources, including those from piped (20.14%) and non-piped (67.61%). However, the coverage of water reserves that are managed safely is still low. A study states that access to safe drinking water sources is only 8.5% [4].

Based on proxy data from the study, the national figure is only 6.8%. Although the projected figures for 2030 state that access to safe drinking water sources is universal, efforts are still needed to improve access to safe drinking water and piped water supply systems. Access to safe drinking water is targeted to reach 15% in 2024 and 43.15% in 2030. Meanwhile, access to piped water supply systems is targeted to reach 30.54% in 2024, and 53.94% in 2030.

Although amendments have been made to the 1945 Constitution, the state constitution in Article 33 Paragraph (3) of the 1945 Constitution still states that "Earth and water and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people". To realize this, the Government through the Regional Government Law stipulates that water is a basic need of the community which is included in the affairs of the government for basic services. One of the water management strategies is carried out by formulating the objective of establishing a Regional Owned Enterprise (BUMD), which among others is to provide public benefits in the form of providing quality goods and/or services for the fulfillment of people's livelihoods.

To carry out the constitutional mandate, the Central Government and Regional Governments are required to take an active role in strengthening the management of BUMD, especially BUMD for Drinking Water so that they are efficient in providing drinking water services effectively and efficiently. The management of BUMD drinking water must always maintain a balance between the fulfillment of the people's right to water and the development of business entities, while prioritizing the sustainability of the availability of drinking water [5].

Drinking water is a basic need of human life that must be available in a sustainable manner in order to improve the health and quality of life of the community. Access to drinking water is not only a necessity but also a human right inherent in all human beings, so the government is obliged to recognize and fulfill this right. To fulfill this, a quality drinking water supply system (SPAM) is needed at an affordable price and integrated with other sectors, especially the sanitation sector to ensure the sustainability, safety and health of drinking water.

In order to fulfill the target of 100 percent safe access to drinking water by 2019, the Ministry of Public Works and

Public Housing along with other stakeholders continues to strive to meet the needs of drinking water services through intensive drinking water infrastructure development, and increasing the capacity of Regional Drinking Water Companies (PDAMs).) in providing drinking water services to the community. As a SPAM operator, apart from being tasked with providing drinking water services that meet the 3K requirements (quality, quantity, and continuity), it is also required to be able to improve the company's financial performance so that Perumda Air Drink is able to access various alternative sources of funding available, including a loan from the Government through the Ministry of Finance to increase the coverage and performance of drinking water services to the community [6].

Regional companies are one of the components that are expected to contribute to regional income, but the main characteristic of regional companies is not profit-oriented (profit), but rather in providing services and organizing public benefits, in other words, companies carry out dual functions that must be guaranteed. balance, namely the social function and the economic function, this can work if professionalism in its management can be realized. Furthermore, [7] stated that the main obligation of drinking water companies is to provide their customers with safe drinking water continuously. To fulfill this obligation, Perumda Air Drink needs to manage its business and various very complex issues and uncertainties in the future.

Perumda Water Drinking in the future will face very complex challenges and problems, especially in water resources, so it needs support for policies and programs, regulatory reform, and financial support from the center. The local government must also play a role in providing support for corporate reform by further encouraging the independence of PERUMDA Water Supply management and providing additional regional capital participation so that drinking water PERUMDA can be more empowered in fulfilling water services that meet 3K aspects, namely quantity, quality, and continuity. The momentum for improving the financial condition of PERUMDA Drinking Water is expected not only to stop at the efforts of the Central Government in providing various accelerated debt settlement schemes, but must be able to be continued with the efforts of PERUMDA Water Drinking in providing quality public services and infrastructure that are truly beneficial to the community as well as improving performance, management and service of water supply to the community, especially in supporting the achievement of the Government's target of 100 percent access to safe drinking water in 2021.

One of the successful management of PERUMDA Water Drinking can be seen in the financial performance of PERUMDA Drinking Water. From the financial performance of PERUMDA Drinking Water, an illustration is obtained of how the process of managing the PERUMDA Water Drinking business is carried out. PERUMDA Water Drinking is one of the BUMDs in Jambi Province,

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whose capital comes from the local government must be managed professionally like a company, so that profits will be obtained for the sustainability of the company and at the same time as a counterweight and contribute to increasing local revenue (PAD). The management of BUMD companies in this case PERUMDA Drinking Water in a professional manner so that it can bring in profits is influenced by various factors. The success of an enterprise depends on several factors, namely the external and internal environment. The external environment is a group of external factors which are determining with having minimal influence, but some of them are opportunities or constraints for companies, so they need to be evaluated in management practice [8]. Financial performance is an analysis conducted to see the extent to which a company has used finances properly and correctly [9]. The company's financial performance is a description of the financial condition of a company which is analyzed with financial analysis tools, so that it can be known about the good and bad financial condition of a company that reflects work performance in a certain period. This is very important so that resources are used optimally in the face of environmental changes. The measuring instrument that can be used in measuring financial performance is by using several ratios, namely Liquidity Ratios, Solvency Ratios, Activity Ratios and Profitability Ratios. According to Brigham [9] explains that, "Liquidity is a ratio that describes the company's ability to meet short-term obligations. These obligations are short-term obligations or long-term obligations that have matured. This liquidity ratio is used to measure the company's ability to meet short-term obligations in a timely manner. Obligations that must be met are short-term debt, and measure whether the company's operations will not be disrupted if these short-term obligations are immediately collected. In addition, there is also the Solvency Ratio, where this ratio is the ratio used to measure the company's ability to pay all its obligations, both short-term and long-term if the company is liquidated. If the company does not have leverage, it means that the company is operating fully using its own capital or without using debt. Furthermore, the activity ratio is a ratio to show the effectiveness of a company in using its assets. This activity ratio is used to assess how efficiently the company can utilize and manage the resources already owned by the company. Signal theory suggests that when a company shows good performance, management has a strong incentive to disseminate company information, especially financial information, in order to increase investor confidence. This ratio is a measure of the company's ability to carry out daily activities. Profitability Ratios, according to Brigham [9] profitability is the company's ability to generate profits by using owned sources such as assets, capital or company sales. Profitability ratio is a ratio to assess the company's ability to seek profit, this ratio also provides a measure of the level of management effectiveness of a company, this is indicated by the profit generated from sales and investment income. The use of profitability ratios can be done by using comparisons between the various components in the financial statements, especially the balance sheet financial statements and the income statement. Good business management is a strategic thing for achieving the success of a business. Research conducted by [10] states that efforts to reduce the level of

water loss for Perumda Water Drinking is a strategic step, because it is related to Perumda Water Drinking stakeholders will also have an effect. Loss of water will lead to poor customer service, low contribution to local government revenues and failure to comply with nature conservation programs. On the other hand, to reduce the rate of water loss, a large amount of capital is required for investment, for example to finance the installation and repair of pipelines, pumps, electric water meters, customer water meters, water treatment costs, fuel costs and expansion of water sources. This study examines economic factors that are thought to be able to complement performance measurement in an organization or company and can spur companies to make improvements more quickly [11-12]. Economic factors, which are thought to influence business management to be studied include: 1) Market share factor; 2) Number of customers; 3) selling price of water; 4) Production costs; and 5) employee costs; and 6) General Administration Costs affect the Success of Drinking Water Business Management for Regional Public Drinking Water Companies in Jambi Province.

II. LITERATURE REVIEW

A. Financial Management

Currently the financial manager plays a very important role, with the development of the task of the financial manager not only to record, make reports, control the cash position, pay bills, and seek funds. However, financial managers must also be able to invest funds, manage the optimal combination of sources of funds, and distribute profits (dividend distribution) in order to increase the value of the company. Every company always needs funds in order to meet daily operational needs and to develop the company. The need for funds is in the form of working capital or for the purchase of fixed assets, to meet these funding needs, the company must be able to find sources of funds with a composition that produces the lowest cost burden. Company's financial management is one of the functional management areas of the company related to long-term investment decision making, and the management of the company's working capital which includes short-term investment and funding. In other words, corporate financial management is a field of finance that applies financial principles within a corporate organization to achieve and maintain value through appropriate decision making and resource management [9]. Financial management is planning, organizing, implementing, and controlling the search for funds at the lowest possible cost and using them effectively and efficiently for organizational operations. Financial Management can be defined as good fund management related to the effective allocation of funds in various forms of investment as well as collection efforts for investment financing or learning efficiently [9]. From the theories above, it can be concluded that financial management is an effort to manage funds collected and allocated to finance all company activities in order to achieve the goals of the company.

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B. Business

Business is an effort to earn profits by providing products and services that meet the needs of the community [13]. The results of the business have intangible and intangible characteristics that provide satisfaction and benefits. Business is an individual structured business in terms of producing and selling to make a profit, in the form of goods and services that fulfill the needs of the community. The general term business refers to all such efforts, namely idioms in society or idioms in industry [14]. Business is an institution that produces goods and services that society demands. In the science of economics, there are needs and wants, these needs and wants are what will give rise to the opportunity for a business. Business is the entire activity and effort to seek profit by providing goods and services that are needed by the community, by producing intangible goods and providing services [15]. Business is any activity that is involved in providing goods and services that people need or want. The opinions of the experts that have been conveyed above can be concluded that Business is an effort that is carried out to fulfill the needs or wants of the community in the form of products or services with the aim of making a profit [16].

C. Market Share

Market share is the proportion of the market controlled by a company, or the percentage of a company's sales to the total sales of its biggest competitors at a certain time and place [17]. Market share will change at any time according to changes in consumer tastes, or the shift in consumer interest from one product to another. Market share is the size of the portion or the total area of the market that can be controlled by a company which is usually expressed as a percentage [18]. From the definition above, it can be concluded that market share is the size or area of the total market controlled by a company which is expressed in the form of a percentage. From this data, it can be seen the position of a company, whether as a market leader, market follower and market initiator.

D. Customer

Customer is a person who becomes a buyer of a product that has been made and marketed by a company, where this person has not only purchased this product once but has repeatedly purchased it [17]. Customer of an icompany is a person who buys and uses product of an company, customer is an individual who continuously has the same desire for empathy an iproduct or obtain a service and satisfy the product or service [19]. Customers are individuals who make purchases to fulfill their personal needs or household consumption. Consumers are decision makers and subjects whose icons are constructive have many contextual influences [17].

E. Selling Price

Machfoedz 2005, stated that the aim of setting a price is to achieve the company's targets, earn profits from sales, increase and develop product production, and expand marketing targets. The pricing of an iproduct or service depends on the objectives of the company or seller who is marketing the product.

F. Production Cost

Cost is the expenditure or value of sacrifice to obtain goods or services which is useful for time which will come, or has benefits over an annual period. There is an ID in the balance sheet as an asset (asset) company [20]. Costs in the broad sense are sacrifices of economic resources, measured in terms of money, those that have occurred or are likely to occur for certain purposes. Cost is the sacrifice of economical sources which is measured in terms of money which have occurred or are likely to occur in order to achieve certain goals [21]. This cost has not yet expired, and is classified as an asset that is included in the balance sheet. The cost object is a basis used to calculate costs. Cost objects include: products, services, projects, customers, brands, activities, departments.

III. RESEARCH METHODS

A. Population and Sample

Population refers to the whole group, person, event, or thing that the researcher wants to investigate [22]. The population of this study were all regional drinking water companies in Jambi Province, totaling 10 companies, namely: Tirta Sakti, Tirta Merangin, Tirta Sako Batuah, Tirta Batang Hari, Tirta Muaro Jambi, Tirta Pengabuan, Trita Muaro Tebo, Tirta Pencuran Telago, Tirta Mayang Jambi City and Tirta Kayangan. Sample is part of the size and characteristics of a population [22]. The sample used is a regional drinking water company in Jambi Province which was selected using the Purposive Sampling technique, namely the sampling method using certain criteria or considerations. The sample selection criteria used are: (1) PERUMDAM in Jambi Province, (2) PERUMDAM which has consecutive financial data for the 2016-2020 period So the sample companies in this study amounted to 9 companies consisting of: Tirta Sakti, Tirta Merangin, Tirta Sako Batuah, Tirta Batang Hari, Tirta Muaro Jambi, Tirta Pengabuan, Trita Muaro Tebo, Tirta Pencuran Telago, and Tirta Mayang Jambi City

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B. Definition of Variable Operations

Variable	Dimension	Indicator	Concept
	Market Share (X1) Market share is the part of the market controlled by a company, or the percentage of a company's sales to the total sales of its biggest competitors at a certain time and place [17], [19]	Service Coverage	Service is the act or deed of a person or an organization to provide satisfaction to customers, fellow employees, and also leaders [17].
	Number of Customers (X2) Customer is someone who comes or has a habit of buying something from a seller [23]. These habits include buying and paying for a number of products that are done repeatedly.	Household (SL)	A household is a group of people who inhabit part or all of a physical building and usually live and eat from one kitchen. Eating from one kitchen means financing needs if the management of daily needs is managed together
Economic Factor	Selling Price of Water (X3) Selling price is the monetary amount charged by a business unit to buyers or customers for goods or services sold or delivered [24].	Average Rate	Selling price is the monetary amount charged by a business unit to buyers or customers for goods or services sold or delivered[24].
(X)	Production Cost (X4) Production costs are costs that are considered attached to the product, including costs, both directly and indirectly that can be identified with the processing of raw materials into finished products[20], [21].	НРР	Cost of goods sold is the purchase price (acquisition) of the goods sold. In a merchandising company, the cost of goods sold is found by: merchandise inventory at the beginning of the period plus net purchases during the period minus merchandise inventory at the end of the period.
	Salary Cost (X5) Salary is remuneration in the form of money received by employees as a consequence of their status as an employee who contributes in achieving company goals [25].	Employee Fee	Salary is remuneration in the form of money received by employees as a consequence of their status as an employee who contributes in achieving company goals [25].
	General Fee (X6) General and administrative costs are costs for coordinating production and product marketing activities [20].	General Adm Fee	General and administrative costs are costs for coordinating production and product marketing activities.

C. Data Technique Analysis

To analyze the data in this study is multiple linear regression analysis. However, before carrying out linear regression multiple regression, a classical assumption test is first carried out. Testing the hypothesis in this study will be analyzed by statistical test F, statistical test t and test coefficient of determination (R^2) .

IV. RESULT AND DISCUSSION

A. Best Model Estimation Test

Chow Test

Table 1 Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F Cross-section	4.338538	(8,30)	0.0015
Chi-square	34.591149	8	0.0000

Source: processed data

Chow test is used to determine whether the selected model is pooled least square or fixed effects. H0 is rejected if the value of the probability F is less than alpha, which is less than 0,10, where H0 is the pooled least squares model and H1 is the fixed effects model. In this test, it can be concluded that the best model to analyze the model in this study is the Fix effect because the probability value of F is smaller than alpha, which is 0.0015.

Hausman Test

Table 2 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.712599	6	0.1904

Source: processed data

Based on the results of the Hausman test, the random effect model was chosen as the best model estimator because the p-value is above 0.05, with a value of 0.1904.

LM Test

Table 3 LM Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	4.054213	1.313794	5.368007
	(0.0441)	(0.2517)	(0.0205)

Source: processed data

The output results above show the Breush-Pagan (BP) probability value of 0.0205. The hypothesis is that if the Breush-Pagan probability (BP) is less than alpha (0.0000 < 0.05), then H0 is rejected (using the random effects model) and H1 is accepted (using the common effect model), based on the results of the LM test, the best model is to use random effects model.

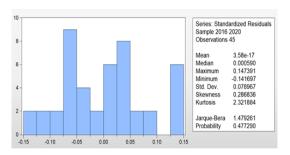


The best estimator model based on the Chow test is the fix effect model, the Hausman test is obtained by a random effect model, the LM test is selected by the random effect model, so in this study will display the results obtained by the random effects model Karen was chosen to be the best model estimator.

B. Classic assumption test

In this study using the classical assumption test with normality test, collinearity test and heteroscedasticity test.

Testing the normality of the data in this study using Jarque Bera is one of the tests to identify whether a random variable is normally distributed or not. Jarque Bera test is often applied in regression analysis to check the assumption of normality or to find out whether the error or random error follows a normal distribution.



Based on the results of the Jarque Bera test, the p-value above 0.05 means that the data in this research model is normally distributed because the p-value of the Jarque fallow test is 0.477.

Multicollinearity Test

	Coefficient	Centered	
Variable	Variance	VIF	
С	0.881926	NA	
Market Share (X1)	0.005620	1.978159	
Number of Customer (X2)	0.008810	2.438595	
Selling Price of Water (X3)	0.004389	1.461053	
Production Cost (X4)	0.004507	2.760264	
Salary Cost (X5)	0.004939	1.868867	
General Adminitration Cost (X6)	0.000532	2.328277	

Source: processed data

Based on table 2 that all variables do not have a correlation between the independent variables, because the VIF (Variance Inflation Factor) value is below 10, so that the data in this study did not experience multicollinearity problems.

Table 5 Autocorelation Test Breusch-Godfrey Serial Correlation LM Test:

F-statistic	5.691732	Prob. F(2,36)	0.7010
Obs*R-square d	10.81086	Prob. Chi-Square(2)	0.4050

Source: processed data

Based on the autocorrelation test using the Breusch-Godfrey Serial Correlation LM Test, the results of Prob. Chi-Square

with a value of 0.4050, this indicates that there is no autocorrelation in this research model, because the chi-square probability value is above 0.05

Heteroscedasticity Test

Table 6 Heteroskedasticity Test: Glejser

F-statistic	1.631095	Prob. F(6,38)	0.1653
Obs*R-squared	9.215887	Prob. Chi-Square(6)	0.1618
Scaled explained SS	7.017473	Prob. Chi-Square(6)	0.3192

Source: processed data

Based on the heteroscedasticity test, there is no symptom of heteroscedasticity seen from the Glejser test because the p-value is 0.1618 which is greater than 0.05.

C. Hypothesis Test Results

The best estimator model based on the Chow test is the fix effect model, the Hausman test is obtained by a random effect model, the LM test is selected by the random effect model, so in this study will display the results obtained by the random effects model was chosen to be the best model estimator, then the regression results are obtained as follows:

Table 7 Economic Factors Affecting the Jambi Province's Drinking Water PERUMDA Business Management

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	-1.853348	1.528294	-1.212691	0.2327	
Market Share (X1)	-0.280700	0 108709	-2.582116		
Number of Customer (X2)	0.260533	0.100709	1.825542		
	0.295682	0.142713	2.264512		
Selling Price of Water (X3)					
Production Cost (X4)	-0.011630	0.107508	-0.108179		
Salary Cost (X5)	-0.036339	0.116518	-0.311870	0.0756	
General Adminitration Cost					
(X6)	0.115209	0.020489	5.623100	0.0000	
	Effects Spe	ecification			
	•		S.D.	Rho	
Cross-section random			0.080212	0.6028	
Cittle steament random			0.065117		
Idiosyncratic random			0.003117	0.3972	
	Weighted Statistics				
R-squared	0.887709	Mean depe	ndent var	0.340835	
Adjusted R-squared	0.806821	S.D. dependent var		0.087513	
S.E. of regression	0.067401	Sum squared resid		0.172630	
F-statistic	6.029426	<u> </u>		2.573443	
Prob(F-statistic)	0.000168				
	Unweighted Statistics				
R-squared	0.552350	Mean depe	ndent var	0.998763	
Sum squared resid	0.340315	Durbin-Wa		1.305416	
our oquare room	0.510515	2 JII 11 II	total other	1.505110	

Source: processed data

Table 8 can be seen that the economic factors that affect the business management of the drinking water PERUMDA in Jambi Province, market share factor has a negative and significant influence on the management of the drinking water PERUMDA business in Jambi seen from the coefficient value of the market share variable is negative, namely -0.280700 and P- value with a value of 0.0138 which is below the 0,10 significance. The number of customers has a positive and significant relationship with the management of the drinking water PERUMDA business in Jambi,

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this is because the coefficient of the variable number of customers has a positive value of 0.260533 and the significance value of the variable number of substitutes has a ski p-value below 0,10, namely 0.0758.

The third economic factor in this study is the selling price of water which has a positive and significant effect, seen from the coefficient value of the water selling price variable of 0.295682 and the P-value below 0,10, which is 0.0293. Production costs have a negative relationship with business management seen from the coefficient value of the production cost variable which is negative, namely -0.011630 and is not significant because it has a p-value above 0,10, which is 0.9144.

Employee costs have a negative and significant relationship with the management of the drinking water PERRUMDA business in Jambi province, this can be seen from the coefficient value of the employee cost variable which is negative -0.036339 with a p-value of 0.0756. General Administration Costs have a positive and significant impact on the management of the drinking water PERUMDA business in Jambi province, this is seen from the variable coefficient of General Administration Costs which has a positive value of 0.115209 and a p-value below 0,10.

D. Discussion

Market Share has a negative effect on business management at PERUMDAM because the distribution channels owned by PERUMDAM are still very limited, the water distribution channel technology used is not optimal in carrying out various activities related to market share, seen from the slow response in the event of water loss, on average an average of 32.80% from 2016 to 2020 which has an impact on business management becoming inefficient and water resource management not being optimal. There are 5 PERUMDAM employees to customers that exceed the average employee to customer ratio, namely PERUMDAM Tirta Merangin, Tirta Sako Batuah, Tirta Muaro Jambi, Tirta Pengabuan, Trita Muaro Tebo. Meanwhile, PERUMDAM Tirta Sakti, Tirta Batang Hari, Tirta Pencuran Telago, and Tirta Mayang Jambi City are still below the average ratio of employees to customers. The results of this study support the results of research by [26-28]

The selling price of water has a positive and significant effect, seen from the coefficient value of the water selling price variable of 0.295682 and the P-value below 0,10, which is 0.0293. The higher the selling price of water, the better the management of PERUMDAM's business. The selling price of water in this case is the price that has been set by the government through PERUMDAM to be paid by the customer. This is also related to the role of BUMN or BUMD in fulfilling or in carrying out social functions in accordance with the provisions by the government in Article 33 of the 1945 Constitution. Based on the results of the study it is known that many PERUMDAM still determine the selling price of water sold below production costs so that many PERUMDAM in Jambi Province still at a loss [29].

General Administration Costs have a positive and significant impact on the management of the drinking water PERUMDA business in Jambi province, this is seen from the variable coefficient of General Administration Costs which has a positive value of 0.115209 and a p-value below 0,10. General administration costs have a positive and significant influence on business management of the drinking water PERUMDA in Jambi province, this is because the general administration costs are managed by PERUMDAM very well, this is seen from the average general administration costs of PERUMDAM jambi above the average, which indicates that the management of general administrative costs is good, thus making PERUMDAM's business management better.

The results of this study are in line with the results of research by [28-30] that drinking water PERUMDA must improve the quality of services and the provision of clean water needs for the community, so that the provision and service of clean water will run well and can satisfy the community so that it will affect business management in PERUMDA. The clean water network development program has had a positive impact on social and economic changes in the community, the role of the Government in initial funding and regional spatial planning that is more accommodating to community needs [31]. Employee costs have a negative but not significant effect indicating that in its management it certainly requires manpower, in this case the labor load is certainly needed for the sustainability of the Jambi province's drinking water PERUMDA operations [8], [32-33]. It can be concluded that it is not significant that the employee burden is not too a problem for the management of the drinking water PERUMDA business in Jambi province.

V. CONCLUSIONS

Based on the results of the analysis carried out, on the variables of economic factors that influence of PERUMDA drinking water business management in Jambi Province, that: (1) Market Share and Sallary cost has a negative significant effect on PERUMDAM Business Management in Jambi because PERUMDAM lacks efficiency in managing market share, so a large market share will reduce PERUMDAM business management. (2) The selling price of water, Number of Costumer and General Administration Costs have positive significant effect on PERUMDAM Business Management in Jambi because the higher selling price of water can increase business management PERUMDAM in Jambi Province.

Production costs have a negative but not significant effect indicating that in its management it certainly requires manpower, this is because the costs incurred by PERUMDA are too high so that in business management it does not have much influence. can improve business governance even better.

More intense socialization is needed to all levels of employees and the directors are also committed to realizing the full, maximum and comprehensive implementation of GCG so that they can fully contribute to regional development.

Business management carried out by the board of directors and supervisory board does not significantly affect the performance of PERUMDA drinking water in Jambi Province,

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so it is necessary to carry out programs by the directors of PERUMDA in business management in order to improve the financial performance of PERUMDA Drinking water in Jambi Province.

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REFERENCES

- BAPENAS, "the Sustainable Development Goals (SDGs) by achieving the 2030 development agenda," Jakarta, 2020.
- M. of Finance, "National Medium Term Development Plan (RPJMN),"
- Ministry of Health, "Basic Health Research Results Report 3. (Riskesdas)," Jakarta, 2018.
- P. Yogayakarta, "Results of DIY Water Quality Survey, 2015," Yogyakarta, 2015.
- K. Tjahyo, "Central Government and Regional Governments are required to take an active role in strengthening the management of BUMD," 2019.
- M. of PUPR, "Regulation of the Minister of Public Works No. 18/PRT/M/2007 concerning Implementation of Drinking Water Supply System Development.'
- J. A. Gleason and C. C. Flores, "Challenges of water sensitive cities in Mexico: The case of the metropolitan area of Guadalajara," Water (Switzerland), vol. 13, no. 5, pp. 1–20, 2021, doi:10.3390/w13050601. [CrossRef]
- S. S. Sonu, L. Kalangi, and J. Warongan, "Analysis of the Implementation of Good Corporate Governance (Case Study at the Duasudara Drinking Water Company in Bitung City)," J. Ris. Account. and audits. "Goodwill," vol. 10, no. 2, p. 149, 2019, doi:10.35800/jjs.v10i2.25624. [CrossRef]
- E. F. Brigham and M. C. Ehrhardt, Financial management: Theory & practice. New York: Cengage Learning., 2013.
- Mursalim, "The moderating effect of efficiency and non-market capability n relationship between government involvement and resources to performance of water supply companies (PDAM) n Sulawesi, Indonesia.," Int. J. Law Manag., 2018, doi: https://doi.org/10.1108/IJLMA-11-2016-0117. [CrossRef]
- Nazarudin, "Measurement of Non-Financial Performance," J. Akunt. Investments, vol. 1, no. 2, pp. 32-34, 2014.
- J. Elkington and I. H. Rowlands, "Cannibals with forks: the triple bottom line of 21st century business," Altern. Journals; Waterloo, vol. Vol. 25, no. 4, pp. 42-43, 1999.
- O. C. Ferrell, G. A. Hirt, and L. Ferrell, Business Foundations A Changing World. New York: McGraw-Hill Education, 2020.
- A. Afuah, Business Model: A strategic Management Approach. New York: McGraw-Hill, 2004.
- L. E. Boone and D. I. Kurtz, Contemporary Business, Translet. Jakarta: Salemba Empat, 2007.
- R. J. Ebert, R. W. Griffin, F. A. Starke, and G. Dracopoulos, Business essentials. Prentice Hall, 2011.
- P. Kotler, K. L. Keller, C. T. Ang, S. H., Tan, and S. M. Leong, Marketing management: an Asian perspective. Harlow: Pearson.,
- 18. M. H. Saputra, "The Effect of 'Health Warning' on Pringles Packaging on Consumer Purchase Decisions.," J. Ekon., vol. 11, no. 2, pp. 38-43, 2021. [CrossRef]
- W. J and Y. Lamarto, Prinsip Pemasaran, Terjemahan. Jakarta: Erlangga, 1996.
- Mulyadi, Akuntansi Biaya, Kelima. Yogyakarta: UPP STIM KPN, 20. 2015
- Harnanto, Cost Accounting. Yogyakarta: ANDI, in collaboration with BPFEUGM, Yogyakarta.
- U. Sekaran and B. Roger, Research Methods for Business: Expertise-Development Approach, 6th Edition, South Jakarta: Salemba Empat, 2017.

- R. Abubakar, Marketing Management. Bandung: ALFABETA, 201.
- Hansen and Mowen, Management Accounting, (Translated. Jakarta: Salemba Empat, 2011.
- A. F. Sikula, Performance Management Systems, Translated Edition. Jakarta: Gramedia Pustaka Utama., 2007.
- 26. R. A. Putra, "Investment Analysis of Clean Water Installation Development in Relation to Increasing Income of PDAM Bandung City," J. Ilm. Education, vol. 4, pp. 221-234, 2016.
- O. Trinita and S. P. Dewi, "Factors Affecting the Performance of Manufacturing Companies Listed on the IDX," J. Multiparadigm Accounts. Tarumanegara, vol. I, no. 3, pp. 748-756, 2019.
- W. Asrida and R. Aswandi, "The Role of Tirta Indra Regional Drinking Water Company (Pdam) in Providing Services in the Provision of Clean Water in Rengat District, Indragiri Hulu Regency," Pekanbaru,
- Agrifa Maser et al, "PDAM's Strategy in Improving Clean Water Quality to Support Development in Batu Tourism City," Jisip, vol. 6, no. 2, pp. 29-36, 2017.
- R. Aswandi, "The role of Tirta Indra Regional Drinking Water Company (PDAM) in providing services in the provision of clean water in Rengat Subdistrict, Indragiri Hulu Regency," Jom Fisip, vol. 1, no. 2, pp. 1-14, 2014.
- A. N. Asthana, "Decentralisation, HRD and production efficiency of water utilities: Evidence from India," Water Policy, vol. 14, no. 1, pp. 112-126, 2012, doi:10.2166/wp.2011.119. [CrossRef]
- B. T. Abe, P. Shrivastava, and K. Moloi, "A review of energy consumption in water supply systems," IEEE AFRICON Conf., vol. 2019-September, 2019, doi:10.1109/AFRICON46755.2019.9133888. [CrossRef]
- P. H. Gleick, "Water and terrorism," Water Policy, vol. 8, no. 6, pp. 481-503, 2006, doi: 10.2166/wp.2006.035. [CrossRef]

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