### FINANCIAL REPORTS ANALYSIS TO IDENTIFY THE FINANCIAL HEALTH OF PERUSAHAAN DAERAH AIR MINUM (Case Study of PDAM Makassar City, Gowa Regency, and Maros Regency)

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ACCOUNTING DEPARTMENT FACULTY OF ECONOMICS AND BUSINESS UNIVERSITAS HASANUDDIN MAKASSAR 2023

### FINANCIAL REPORTS ANALYSIS TO IDENTIFY THE FINANCIAL HEALTH OF PERUSAHAAN DAERAH AIR MINUM (Case Study of PDAM Makassar City, Gowa Regency, and Maros Regency)

as one of the requirements to obtain degree of Bachelor of Economics

prepared and filed by

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to

ACCOUNTING DEPARTMENT FACULTY OF ECONOMICS AND BUSINESS UNIVERSITAS HASANUDDIN MAKASSAR 2023

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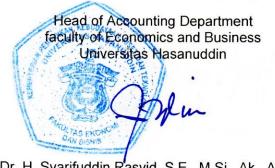
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it is my own scientific work and to the best of my knowledge in this thesis manuscript there is no scientific work that has been submitted by other people to obtain an academic degree in a university, and there are no works or opinions that have been written or published by other people, except those that are written cited in this manuscript and mentioned in the citation sources and bibliography.

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### PREFACE

Assalamu'alaikum Warahmatullahi Wabarakatuh ....

Praise the researcher gratitude to Allah SWT. for His blessings, grace, and gifts so that researcher can complete this thesis. This thesis is the final assignment to achieve the Bachelor of Economics degree at the Department of Accounting Faculty of Economics and Business Universitas Hasanuddin.

The researcher would also like to thank all those who have helped complete this thesis. This thesis is entitled financial reports analysis to identify the financial health of Perusahaan Daerah Air Minum (case study PDAM Makassar City, Gowa Regency, and Maros Regency). Many parties have helped in completing this thesis both morally and spiritually, therefore this researcher would like to thank:

The Most Glorious Allah SWT. who has given physical and mental health, and provided smoothness to researchers from the beginning to the end of writing this thesis. Both of my parents, my father Husain S. sos., MM and my mother Amra Widana S. Pd and all my family who have provided assistance in the form of prayers and materials sincerely and as well as full support and patience for all the actions and behavior of the author.

Both supervisors, Mr. Dr. Yohanis Rura, SE, Ak., M.SA, CA and Mr. Afdal, SE, M.Sc, DEc., Ak for guidance, advice, direction, and support to researchers regarding the writing of this thesis. Both examiners, Mr. Dr. H. Amiruddin, S.E., Ak. M.Si., CA., CPA and Mrs. Dra. Hj. Nurleni, Ak., M.Si., CA who have provided input related to the writing of this thesis. The Dean of the Faculty of Economics and Business, Universitas Hasanuddin, Prof. Dr. Abdul Rahman Kadir, S.E., M.Si., and his staff, especially the Vice Deans I, II, and III, as well as the Head of the Accounting Department, Dr. H. Syarifuddin Rasyid, S.E., M.Si., Ak., ACPA

and all his staff who have taught and shared their knowledge while the researchers studied at the Faculty of Economics and Business, Universitas Hasanuddin. Lecturers of the Faculty of Economics and Business, Department of Accounting who have provided knowledge and guidance for researchers. All staff and employees of the Faculty of Economics and Business who have helped in administrative matters.

The owner of student identification number 200901502080, thank you for providing assistance, enthusiasm, and motivation in working on this thesis Friends "Beban Orang tua", "Anti Pelit", and other friends who cannot be mentioned one by one, thank you for your support and prayers. The managing directors of PDAM Makassar City, PDAM Gowa Regency, and PDAM Maros Regency have given permission to conduct research and help facilitate my research. All my closest relatives, especially Accounting and Management 2019, as well as all relatives in the Faculty of Economics and Business, Universitas Hasanuddin who cannot be mentioned one by one, that in the preparation of this thesis it is still far from perfection, therefore the researcher hopes for constructive criticism and suggestions in the hope of making the research carried out by the next research better and useful for readers. Finally, I hope this thesis is useful for parties who need information related to this research. That's all and thank you.

Makassar, 08 August 2023. Researcher,

Andi Prayitno

### ABSTRACT

#### Financial Reports Analysis to Identify the Financial Health of Perusahaan Daerah Air Minum (Case Study of PDAM Makassar City, Gowa Regency, and Maros Regency)

### Analisis Laporan Keuangan untuk Menentukan Kesehatan Keuangan Perusahaan Daerah Air Minum (Studi Kasus PDAM Kota Makassar, Kabupaten Gowa, dan Kabupaten Maros)

Andi Prayitno Yohanis Rura Afdal

This study examines the financial performance of three regional drinking water companies (PDAMs) in Indonesia: PDAM Makassar City, PDAM Gowa Regency, and PDAM Maros Regency, using the Altman Z-Score model. PDAM Makassar City demonstrates a healthy financial condition, while PDAM Gowa Regency and PDAM Maros Regency are vulnerable to bankruptcy. Recommendations include improving working capital management and profitability for the latter two companies, while PDAM Makassar City should focus on optimizing asset management and exploring expansion opportunities for long-term sustainability. Further analysis and consultation with financial experts are advised for a comprehensive understanding of each company's financial position and suitable strategies.

# **Keywords :** Financial performance, Regional drinking water companies, Altman Z-Score, Bankruptcy vulnerability.

Studi ini menganalisis kinerja keuangan tiga perusahaan air minum daerah (PDAM) di Indonesia: PDAM Kota Makassar, PDAM Kabupaten Gowa, dan PDAM Kabupaten Maros, dengan menggunakan model Altman Z-Score. PDAM Kota Makassar menunjukkan kondisi keuangan yang sehat, sementara PDAM Kabupaten Gowa dan PDAM Kabupaten Maros rentan terhadap kebangkrutan. Rekomendasi yang diajukan mencakup perbaikan manajemen modal kerja dan profitabilitas untuk dua perusahaan terakhir, sementara PDAM Kota Makassar harus fokus pada pengoptimalan manajemen aset dan eksplorasi peluang ekspansi untuk keberlanjutan jangka panjang. Disarankan untuk melakukan analisis lebih lanjut dan berkonsultasi dengan ahli keuangan guna memperoleh pemahaman menyeluruh tentang posisi keuangan masing-masing perusahaan dan strategi yang sesuai.

*Kata Kunci :* Kinerja keuangan, Perusahaan air minum daerah, Altman Z-Score, Vulnerabilitas kebangkrutan.

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### CHAPTER I PRELIMINARY

#### 1.1 Background

Water is one of the essential needs for all aspects, especially in everyday life. This indicates that water is a necessity that cannot be lost in life. This is also directly related to the human body where most of the human body is formed and consists of water, so humans really need water in their life.

The availability of clean water in the community was quite minimal so companies managed by the respective regions and under the auspices of the government emerged, namely *Perusahaan Daerah Air Minum* (PDAM). This company is engaged in the sector of providing clean water to the community. The community really needs the existence of this regional drinking water company because it can fulfill the community's needs. *"Salah satu tujuan PDAM adalah turut serta dalam melaksanakan pembangunan daerah khususnya pembangunan ekonomi, dengan cara menyediakan air minum yang bersih, sehat dan memenuhi persyaratan kesehatan bagi masyarakat disuatu daerah, yang sekaligus merupakan wujud pelayanan yang diberikan oleh pemerintah kepada masyarakat (one of the objectives of PDAM is to participate in carrying out regional development, especially economic development, by providing clean, healthy drinking water that meets health requirements for the community* 

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in an area, which is also a form of service provided by the government to the community)" (Andriani, 2018)

However, the current performance of the regional drinking water companies at indicates that they did not perform well. This situation is caused because this company is also profit-oriented. One of its functions is to fulfill the need for clean water according to the needs of the community. Whereas the company's performance can be seen from the fulfillment of functions and financial measurements. According to Wahyudi (2009) "*keberhasilan manajemen dalam kegiatan operasional perusahaan dapat diukur dari hasil kegiatan operasional perusahaan* (the success of management in the company's operational activities can be measured by the results of the company's operational activities)".

In general, the condition of regional water companies in Indonesia still faces several challenges such as inadequate infrastructure, limited funding, water quality that does not meet standards, and limited manpower. Nonetheless, some regional water companies have taken initiatives to improve the quality of their services by undertaking infrastructure improvements, procurement of new equipment, workforce training, and more efficient water management. The company's financial performance can be used as a reference in measuring the success of a company. The company's financial performance is a guideline for the company's achievements that arise as a result of the management decision-making process. Which financial performance has benefits for the

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effectiveness of capital utilization, efficiency and profitability of performance activities. The financial performance produced by a company in a certain period is evidence of whether a company is healthy or not. Besides being able to provide profits for owners of capital or investors, a healthy company can also demonstrate the ability to pay debts on time.

The company's financial performance is one of the things that potential investors consider before investing in a company. For a company, maintaining and improving financial performance is an obligation so that the shares are in good condition and remain in demand by investors. Companies with good financial performance will have an impact on high returns for the company. With a high return, investors hope to get a high return on the investment made. According to Eduardus (2010) "*Return yang diperoleh para investor tergantung oleh instrumen yang digunakan* (the return obtained by investors depends on the instrument used)"

High returns affect the value of the company itself, so that the company can pay dividends to investors. However, there are times when the dividend is not paid by the company because the company feels the need to reinvest the profits earned. The amount of the dividend can affect the value of the company. If the dividend paid is high, then the value of the company is also high and if the dividend paid to shareholders is small then the value of the company also tends to be low.

The financial statements issued by the company are a reflection of the company's financial performance. Financial information has a function as an accountability tool and also as a means of information. At first, the financial statements were only a test tool for a company from the work of the bookkeeping department, but over time the financial reports became the basis for determining the position of financial statements and also for knowing the value of a company. "*Laporan keuangan merupakan gambaran keberhasilan perusahaan dan sebagai bahan pertimbangan dalam pengambilan keputusan* (Financial statements are a picture of the company's success and as a consideration in decision making)" (Sofyan, 2018). Capital market players often use the information contained in the financial statements as a benchmark or guideline for buying and selling shares of a company.

However, ordinary people who want to invest in a company, tend to experience difficulties in understanding the financial statements issued by the company. Company's financial statements only describe in general the condition of the company. Therefore, further analysis is needed by people who have the ability to analyze financial statements. Thus, investors can use the results of the analysis as a reference before investing funds in the company.

This analysis is carried out to avoid unwanted things that have the potential to cause losses to investors. One thing to avoid is the manipulation of financial statements. This is often done by some

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individuals to get personal gain. By anticipating these problems, investors can minimize losses.

Based on these conditions, researcher wants to find out more about PDAM financial performance. More specifically, researchers want to see and find out more about the PDAM financial health. Therefore, the researchers wanted to make PDAM Makassar City, Gowa Regency, and Maros Regency the object of research.

As for the research title that the researcher proposes, namely "Financial Reports Analysis to Identify the Financial Health of *Perusahaan Daerah Air Minum* (Case Study of PDAM Makassar City, Gowa Regency, and Maros Regency)"

#### **1.2 Formulation of the Problem**

Based on the explanation in the research background section, the researcher formulated the problems in this study, are the PDAM of Makassar City, Gowa Regency, and Maros Regency healthy or experiencing financial distress?

#### 1.3 Research Purposes

By the formulation of the problem, this study aims to to know the level of the financial soundness of PDAM Makassar City, Gowa Regency, and Maros Regency.

### **1.4 Research Contribution**

In theory, this research demonstrates the application of financial performance analysis to companies, especially PDAM. This research can also be a reference for further research.

Practically, this research can be useful as follows:

1. for Government

the Result of this study can be use as evaluation material for companies that are directly shaded by the government.

2. For Investors

the Result of this study can be use as a reference in investing their funds in targeted *Perusahaan Daerah Air Minum*.

3. For Communities

the Result of this study can be the initial assessment of the performance of companies whose areas are directly shaded by the government.

#### **1.5 Writing Systematics**

Title : Financial Reports Analysis To Identify The Financial Health Of Perusahaan Daerah Air Minum (Case Study Of PDAM Makassar City, Gowa Regency, And Maros Regency)

Abstract : This study examines the financial performance of three regional drinking water companies (PDAMs) in Indonesia: PDAM Makassar City, PDAM Gowa Regency, and PDAM Maros Regency, using the Altman Z-Score model. PDAM Makassar City demonstrates a healthy financial condition, while PDAM Gowa Regency and PDAM Maros Regency are vulnerable to bankruptcy. Recommendations include improving working capital management and profitability for the latter two companies, while PDAM Makassar City should focus on optimizing asset management and exploring expansion opportunities for long-term sustainability. Further analysis and consultation with financial experts are advised for a comprehensive understanding of each company's financial position and suitable strategies.

Chapter I Preliminary : Water is one of the essential needs for all aspects, especially in everyday life. This indicates that water is a necessity that cannot be lost in life. The availability of clean water in the community was quite minimal so companies managed by the respective regions and under the auspices of the government emerged, namely *Perusahaan Daerah Air Minum* (PDAM). This company is engaged in the sector of providing clean water to the community. The community really needs the existence of this regional drinking water company because it can fulfill the community's needs.

Chapter II Literature Review : The literature review in this study will discuss financial statements, financial health, and how financial performance affects financial health. this literature review also discusses the Altman Z Score assessment as a tool or medium for calculating financial health. Chapter III Research Method : In accordance with the variables in the research title, the researcher uses a qualitative research approach or method because the researcher wants to deepen the phenomena that exist in the research object and describe the research results. The type of research use is case study research. The reason the researcher chose this type of research is because this research has several sources that are used to look for existing phenomena.

Chapter IV Research Results : From the average Z score of the three companies, two companies are predicted to fall into the financial distress criteria or high risk of bankrupcy, and one other company is included in the healthy category. For PDAM Makassar City, the average Z score for 2 years is 3.958 and is included in the healthy category. For PDAM Gowa Regency, the average Z score for 2 years is 0.241 and it is categorized as a gray area or prone to bankruptcy. In PDAM Maros Regency, the average Z score for 2 years is 0.581, and is predicted to fall into the financial distress criteria or high risk of bankrupcy.

Chapter V Conclusions : PDAM Makassar City appears to have a healthy financial performance. Although the WCTA (X1) ratio shows a decrease from 2019 to 2020, the company is still able to manage its current assets well. Meanwhile, PDAM Gowa Regency and PDAM Maros Regency appear to be vulnerable to bankruptcy. Both companies experience a decrease in the WCTA (X1) ratio, indicating a decline in the company's ability to meet short-term obligations.

### CHAPTER II LITERATURE REVIEW

#### **2.1 Financial Statements**

Analysis of company financial statements is closely related to the field of accounting which is one of the activities of recording, analyzing, and interpreting financial data from corporate institutions and the exchange of goods and services. According to PSAK No. 1 (2015), "*laporan keuangan adalah penyajian terstruktur dari posisi keuangan dan kinerja keuangan suatu entitas* (financial statements are a structured presentation of the financial position and financial performance of an entity)". This report displays the entity's history quantified in monetary value.

Parties with an interest in the financial position and development of a company are company owners, managers of the company concerned, creditors, banks, investors, the government and other interested parties. Financial statement analysis techniques are intended to obtain comparisons and the relative strength of the data presented to assess the company's financial position. These techniques include ratio analysis, common-size analysis, and comparisons. There are four important aspects that are generally analyzed in financial statements, namely statements of financial position, profit and loss, changes in capital, and cash flows.

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Everything that is needed must have a function for the company for example, the function of financial reports is to provide useful information for investors, creditors, and other users who have an interest in making decisions related to financial reports. The second function is to provide information that assists investors, creditors, and other users in interpreting possible future cash receipts from interest at maturity on securities or corporate debt. In addition, financial reports also provide information about the company's financial performance during an accounting period. Each financial report provides information about how the company obtains and spends its cash, as well as other factors that affect the company's liquidity and solvency.

Financial statements are the result of the accounting process where each transaction can be measured in terms of money, recorded, and processed in such a way as to provide historical information to company managers or other interested parties. According to Harry (2016), financial statement analysis means a process of analyzing financial statements into their elements and investigating each of these elements to obtain a good and precise understanding and understanding of the financial statements themselves. Financial reports are essentially an assessment of the financial condition and potential or progress of a company in an accounting period. Munawir (2002) concluded, "financial reports are the result of an accounting process that can be used as a tool for communicating financial data or activities of a company with parties interested in the data or activities of the company".

### **2.2 Financial Performance**

Financial performance is an analysis carried out to determine the extent to which the company has used financial implementation rules that have been determined by standards and provisions in SAK (Financial Accounting Standards) or GAAP (General Accepted Accounting Principles). Financial performance by IFRS (International Financial Reporting Standards) refers to a company's financial results that are reported in accordance with IFRS. IFRS are a set of accounting standards developed by the International Accounting Standards Board (IASB) to provide a common set of rules for financial reporting across the world.

The purpose of IFRS is to ensure that financial statements provide relevant and reliable information that is useful to investors, lenders, and other stakeholders in making informed decisions. According to Junita and Khairani (2013), financial performance is a description of the level of achievement of company policies that have been implemented in the company's efforts to achieve its goals, especially in the field of corporate finance by looking at the relationship between income and expenses that have been presented in the financial statements.

Financial management is one of the management systems in totality. Good and appropriate management will lead to the achievement of

industrial/organizational goals, on the other hand, poor financial management will disrupt the overall performance of the company and limit the achievement of industrial goals. The achievement of company goals is more borne by financial managers in the context of finding and managing funds owned by the company.

Financial management is all activities related to the acquisition, funding, and management of assets with some common goals, one of which according to James C. van Horne as quoted by Kasmir (2013: 5) states that, financial management is all activities related to the acquisition of, income and processing of assets with several overarching objectives.

From this interpretation, it can be understood that financial management is a series of processes that are evenly distributed, containing all activities related to methods of obtaining, managing, and using funds or finances of an industry or a business to finance each business activity. To achieve the industrial goal of getting the maximum profit/profit from each activity attempted.

The most important function of financial management is a tool for making investment decisions. financing and dividends on organizations or companies. The function of financial management science is to serve as a guide for company managers in making decisions. Therefore "financial management has a major contribution in the company so that company managers should be able to carry out financial management functions properly" (Fahmi, 2015).

#### 2.3 Analysis of Company Financial Statements

Financial reports are needed by various parties as reference material in economic activities related to the implementation of financial decision-making. Then how can we know the financial situation of a company? and what instruments are applied to evaluate the financial capability of a company?

It is important to carry out financial statement analysis where financial statement analysis is needed to find out the financial condition of a company so that it can be used as material for consideration in decision making. Instruments that are often used in carrying out financial statement analysis are usually called ratios. There are several types of ratios that are often used in financial statement analysis, such as profitability/profitability ratios and others.

Financial statement analysis aims to determine the company's financial condition. Which analysis used consists of liquidity analysis, solvency analysis, profitability analysis, and activity analysis (leverage) (Nurmansyah, 2017:2). Financial statement analyzers in analyzing financial ratios can make comparisons.

The first is Time Series analysis, which compares the current ratio with previous ratios or compares the company's financial ratios from one period to another. With this comparison, ratio changes can be seen every year. A comparison of the ratios achieved at this time with past financial ratios shows whether the company is progressing or declining. The second is Cross Section analysis, which compares the ratios of similar companies to other companies at the same time. By comparing the company's ratio with the industry's ratio, it can be seen that the company in question is in a certain aspect namely, whether it is above the industry average, below, or at the industry average. So with this approach, it can be seen how good or bad a company is compared to other similar companies.

In assessing the performance of finances, the financial situation of a company can therefore be carried out by analyzing or reviewing financial reports so that they can provide insight and insight into the company. According to Harry, (2016) "analisis laporan keuangan merupakan suatu proses dalam membedakan laporan keuangan ke dalam unsurnya dan menelaah masing-masing dari unsur tersebut yaitu dengan suatu tujuan untuk memperoleh pemahaman yang baik dan tepat atas laporan keuangan itu sendiri (financial statement analysis is a process of differentiating financial statements into their elements and examining each of these elements, namely with a view to obtaining a good and proper understanding of the financial statements themselves)". In analyzing financial statements, a financial report is divided based on financial items, applying certain methods and techniques to pay attention to certain measurements and relationships to understand the financial situation more deeply. In this way, financial reports have more meaning and can be used as material for consideration in how decision-making works.

#### 2.4 Company Financial Health

Measuring the soundness of a company is a step to being able to provide assumptions about a company. These assumptions provide the results of an assessment of how the company is conducted on a day-today basis. Based on the results of this assessment, owners and interested parties within the company can make decisions about the company. The health of the company indicates the financial conditions of the company (tangdialla, 2020).

The health of the company is a written statement signed by the company and its management which contains the overall vision and goals of the company. To measure the level of bankruptcy of the company which includes the company's activities as a whole which are lay and operational in nature. According to Slamet and Pratiwi, (2006) "*tingkat kesehatan keuangan dapat diartikan sebagai penilaian atas suatu kondisi keuangan perusahaan pada periode dan saat tertentu sesuai dengan peraturan yang berlaku* (the level of financial health can be interpreted as an assessment of a company's financial condition at a certain period and time in accordance with applicable regulations)".

### 2.5 Identification of Financial Health

Financial health consists of being safe, and prone to bankruptcy. Where safety is a business entity that is said to be healthy which is in a safe zone and does not have the potential to experience financial difficulties or bankruptcy with a Z-Score value greater than 3.0 (Z-Score > 3.0). Prone to Bankrupt is a business entity that is in a vulnerable zone or a gray area with a Z-Score value of 1.8 to 3.0 (1.8 < Z-Score < 3.0). Business entities in the gray area cannot be predicted whether they will become bankrupt in the future or not. This condition depends on the business entity itself. A Bankrupt is a business entity that is categorized as experiencing financial difficulties and has the potential for bankruptcy with a Z-Score value of less than 1.8 (Z-Score < 1.8). Financial distress is a condition that indicates the stage of decline in the company's financial condition that occurred before bankruptcy or liquidation occurred.

#### 2.6 Altman Z-Score

The Altman Z-score assessment is a financial analysis tool that helps determine the likelihood of a company going bankrupt or experiencing financial distress. It was developed by Edward I. Altman, an NYU professor, in the late 1960s and has been widely used by financial analysts and investors ever since. The Altman Z-score uses a combination of financial ratios that measure a company's liquidity, profitability, solvency, and other factors to determine the overall financial health of the company. Sartono (2010) reveals that the Z (zeta) discriminant formula derived by Altman is:

#### Z=1,2X1+1,4X2+3,3X3+0,6X4+1,0X5

The ratios used in the Altman Z-score are:

1. Working Capital / Total Assets (X1) : This ratio measures a company's liquidity and its ability to pay its current liabilities.

- Retained Earnings / Total Assets (X2) : This ratio measures a company's profitability and how much of its earnings are being retained in the business.
- Earnings Before Interest and Taxes (EBIT) / Total Assets (X3) : This ratio measures a company's operating efficiency and how much profit it generates from its assets.
- Market Value of Equity / Total Liabilities (X4) : This ratio measures a company's solvency and how much its assets are worth relative to its liabilities.
- 5. Sales / Total Assets (X5) : This ratio measures a company's productivity and how much revenue it generates from its assets.

The Altman Z-score is calculated by combining these ratios into a single score. Companies with a Z-score above 3.0 are considered healthy and financially stable, while those with a Z-score below 1.8 are considered to be at high risk of bankruptcy or financial distress. Companies with Z-scores between 1.8 and 3.0 are in a gray area, and further analysis may be required to determine their financial health. The Altman Z-score is used as a financial health assessment tool because it provides a quantitative measure of a company's financial health and the likelihood of bankruptcy or financial distress. The score is based on a combination of financial ratios that measure different aspects of a company's financial health, including liquidity, profitability, solvency, and other factors.

There are several reasons why the Altman Z-score is a useful tool for financial health assessment:

- Provides early warning signs: The Altman Z-score can provide early warning signs of potential financial distress or bankruptcy, allowing investors and analysts to take corrective action before it's too late.
- Easy to use: The Altman Z-score is easy to calculate, and the ratios used in the calculation are widely available in a company's financial statements.
- 3. Widely accepted: The Altman Z-score has been widely accepted by investors, analysts, and academics since its development in the late 1960s. It has been used to assess the financial health of companies in a wide range of industries.
- 4. Effective for comparative analysis: The Altman Z-score is effective for comparative analysis of different companies within the same industry. It allows investors and analysts to compare the financial health of companies with similar business models and identify potential outliers.

### 2.7 Empirical Review

The empirical review is relevant to research that supports the research findings. The author has collected several journals related to the research theme as follows:

No	Name of			
	Researcher	Research Title	Research	Research result
	/ Year		methods	
1.	Paleni	Financial Performance	This	Based on the financial reports, especially
	(2015)	Analysis of PDAM Tirta	Research	the profit/loss report of PDAM Tirta Bukit
		Bukit Sulap,	Using	Sulap, Lubuklinggau City from 2008 to
		Lubuklinggau City.	Qualitative	2012, shows that PDAM Tirta Bukit Sulap,
			Methods.	Lubuklinggau City, always experiences
				losses, however, even though it always
				suffers losses, PDAM Tirta Bukit Sulap,

### Table 3.1 Provious Research

				Lubuklinggau City is still able to survive.
2.	Tangdialla,	Analysis of Financial	Research	Based on Kepmendagri No. 47 of 1999
	Tangdialla,	Performance in Regional	Using	article 3 paragraph (1), concerning the
	Natalia, &	Drinking Water	Quantitative	level of success of PDAMs, Makassar City
	Matasi	Companies (PDAM) in	Research	PDAM gets the "Good" category with a
	(2020)	Makassar City.	With	performance classification of 66.67.
			Secondary	
			Data.	
3.	Andriani	Evaluation of Financial	Data. The research	Based on the results of the 2017
3.	Andriani (2018)		The research	Based on the results of the 2017 performance, it has increased from 2016,
3.		Performance in Regional	The research method used	
3.		Performance in Regional	The research method used	performance, it has increased from 2016,
3.		Performance in Regional Drinking Water	The research method used in writing is quantitative	performance, it has increased from 2016, but there are still indicators that still need

4.	Yuliska	Analysis of the Liquidity	This study	Based on data analysis on the level of the
	(2022)	Ratio as an Assessment	uses a	financial soundness of the Regional
		Tool to Measure	quantitative	Drinking Water Company (PDAM) in Gowa
		Financial Performance in	methodology	Regency from the 2017-2019 financial
		the Regional Drinking		report data, it can be concluded that based
		Water Company (PDAM)		on the current ratio, it is in the sufficient
		Tirta Jeneberang Kab.		category, but financial health is at an
		Gowa		unhealthy level.