Financial Distress Analysis as an Effort to Find out the Financial Condition of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

Riyanah, Nana Romaha
Universitas Pawyatan Daha

ABSTRACT: The aim of this study is to predict financial distress in Gampengrejo KUD in 2018-2021 in lending. The research method uses Zmijewski. The analysis to be measured is ROA, DER and CR. The results of this study are the prediction of financial distress in KUD Gampengrejo in 2018-2021 in providing credit to customers with different results. In 2018 Zmijewski's value was 0.067 or 0.067 > 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy. In 2019, Zmijewski's value was -0.155 or -0.155 <0, this means that the company is in a healthy financial condition and is not experiencing financial difficulties or is in danger of going bankrupt. In 2020, Zmijewski's value is 0.270 or 0.270 > 0, this means that the company is in financial distress. In 2021 Zmijewski's value is 0.492 or 0.492 > 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy.

KEYWORDS: financial difficulties, finance, Zmije

PRELIMINARY

According to the Law of the Republic of Indonesia Year 10 (1998), entities that collect public funds in the form of deposits and generally channel public funds in the form of credit and other forms to improve the standard of living of the community (OJK), one of which is the village unit cooperative. Village unit cooperatives are responsible for mediating the supply and demand for credit at a certain point in time in rural areas.

Financial institutions, especially cooperatives in their activities, financial institutions play a role in collecting and distributing funds. Loans are financial institutions that allow individuals or companies to borrow money to buy and repay a product within a certain period of time.

Credit activities carried out in KUD Gampengrejo II as a financial facility that can provide an opportunity for someone to get the product and pay the nominal within the agreed period. Products required by KUD Gampengrejo II only focus on agricultural products. This credit is in the form of consumptive and useful credit to develop business in agriculture. The distribution of funds formed in the credit is very containing low and highrisk levels.

Therefore, in this study conducted at KUD Gampengrejo II. Thus, the achievements of this study are useful to know the system in the credit granting policy and assess whether or not the credit is channeled to prospective customers. KUD Gampengrejo II as a creditor who provides credit and must assess the factors that exist in prospective customers who served as debtors. Related to the procedure system is indispensable. It is used as an analysis of lending from creditors to debtors.

This system is very important to understand, so that lending can run easily, and the debtor understands the stages that must be followed. KUD Gampengrejo II, in the previous time there has never been a review of the credit policy system, conditions on debtors and financial statement analysis. Therefore, this problem needs to be understood and will be done in this study. This, as an effort KUD Gampengrejo II as a stepin providing credit, and the KUD Gampengrejo II should be able to improve the financial effectiveness of the credit granting system and should try their best in minimizing the risk of credit called financial distress that will arise. This, as an understanding in order to minimize credit failure due to lack of monitoring of interbal control that has been built between the commitment of KUD Gampengrejo II with the debtor.

According to (Husein & Pambekti, 2015) Financial distress can be characterized by a decrease in various financial ratios, a decrease in assets, a decrease in sales, a decrease in profits and profitability levels, lower working capital, and an increase in debt

Financial Distress Analysis As An Effort To Find Out The Financial Condition Of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

that continues. There are several methods developed by researchers to predict financial distress, one of which is Zmijewski which can be a reference to determine whether the company is experiencing financial difficulties or not.

Based on the information above, this research is stated with the title "Financial Distress Analysis as an Effort to Know the Financial Condition of KUD Gampengrejo II Kediri".

PROBLEM FORMULATION

The formulation of the problems that will be discussed in this study is how financial distress analysis as an effort to determine the financial condition of KUD Gampengrejo II Kediri Regency in 2018-2021 in providing credit?

PURPOSE AND USEFULNESS OF RESEARCH

1. Research Objectives

Based on the formulation of the problem, the research objective is to analyze financial distress as an effort to determine the financial condition of KUD Gampengrejo II Kediri Regency in 2018-2021 in providing credit.

2. The usefulness of research

1) Theoretically used to understand the financial statements of KUD Gampengrejo II to achieve the achievement of financial distress analysis.
2) Practically, namely:
a. For the author to provide benefits in adding insight into the field of accounting economics.
b. For KUD Gampengrejo II as a guide and add knowledge to the application of financial statements in achieving the achievement of financial distress analysis.

LITERATURE REVIEW

Profitability Ratio

According to Damayanti (2021) the effectiveness of using assets to generate profits from both sales and investment will make the company survive and avoid financial distress. According to Damajanti (2020: 41) the Profitability ratio is a comparison of the use of profit with the entity's resources (assets or equity). Companies with a high profitability ratio, the company has sufficient financial capacity to meet its operational needs.Then it can be concluded that the profitability ratio is a ratio that measures the extent to which the company profits from its total assets in a certain period. The effectiveness of using assets to generate profits from both sales and investment will make the company survive and avoid financial distress.

According to Ross (2015: 72) states that Return on Assets (ROA) is a form of profitability ratio which is intended to be able to measure how many percent of net profit is generated for each rupiah of total assets. (Dewi, 2018: 325) Return On Asset (ROA) is a ratio that measures how efficiently a company manages its assets to generate profits during one period. Yunia (2018), Return on Asset is a ratio that shows the ability of all existing assets and is used to generate profits.

Leverage Ratio

According to Mahaningrum (2020: 1972), it can be concluded that the leverage ratio is a ratio that measures the extent to which the company uses debt to finance company operations. Companies with a higher level of leverage will require greater cash flow to pay the interest and principal of its debt contracts, thus placing greater restrictions on the company's financial resources. If the company continues to increase debt, the company may experience financial distress, therefore increasing debt is tantamount to increasing financial distress. Ross (2016: 67) states that the Debt to Equity Ratio is a form of leverage ratio which is intended to measure the ratio between total debt and total equity. Mahaningrum (2020: 1972) Debt to Equity Ratio is the company's ability to pay off all its obligations with the capital they have. Indriaty (2019: 42) Debt to equity ratio is used to measure the ratio of total debt to equity funds.

Liquidity Ratio

Ross (2015: 64) states that the liquidity ratio is used to measure the company's ability to pay debts or short-term obligations. Fatimah (2019: 107) liquidity ratio is a ratio that illustrates how the company's ability to meet its short-term debt or obligations. Agustini (2019: 254) liquidity ratio is the ability of an entity to meet its short-term debt or liabilities pay off the company's current liabilities by utilising its current assets. Durrah (2016: 436), the liquidity ratio is a ratio to measure the company's ability to meet its short-term obligations.

Financial Distress Analysis As An Effort To Find Out The Financial Condition Of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

Ross (2015: 64) states that the current ratio is a form of liquidity ratio which is intended to be able to measure the ability to pay short-term debt with current assets. Durrah (2016: 436), the current ratio is used to measure the company's ability to pay short-term obligations such as accounts payable and short-term loans, which is a comparison between current assets and current liabilities. Current Ratio is a liquidity ratio that measures the entity's ability to pay short-term obligations.

Financial Distress

According to Wahyu Adi Priyanti & Budi Riharjo (2019) financial distress can be explained as a condition where a company is experiencing financial difficulties and will be threatened with bankruptcy. Bankruptcy itself can be explained as a situation where the company fails to carry out company operations, resulting in a company that cannot generate profits and cannot pay creditors, company cannot generate profits and cannot pay creditors.

There are several definitions of financial distress, namely according to Platt and Platt (2006) in Saputri & Krisnawati's research (2020):

a.   Economic failure
b.   Business failure
c.   Technical insolvency
d.   Insolvency in bankruptcy
e.   Legal bankruptcy

Credit Management

According to Law No. 10/1998 article 21 paragraph 11 credit is the provision of money or bills that can be equated using it, from lending and borrowing agreements or conventions between banks using other parties that oblige the borrower to pay off his debt at the end of the term when exclusively using interest rewards. From the above definition, it can be explained that credit can be in the form of money or bills whose value can be measured using money. Then there is a convention between the bank (creditor) using the credit recipient customer (debtor), that they agree synchronously using the agreement they have made. The credit agreement includes the rights & obligations of each party, including the period of time and interest set together. Likewise, the use of penalties if the debtor breaks the promise of the agreement that has been formed together.

Village Unit Cooperative (KUD)

Based on the Presidential Instruction of the Republic of Indonesia, No. 4 of 1973, with article 1 which discusses the Village Unit Cooperative as an agro-economic unit of the community in the village area, which has a set of functions both from the field of credit, agriculture, production facilities, processing and marketing in order to increase production of agricultural products. This is also related to the economic development of organised village communities in order to improve the standard of living of producer farmers, especially the communities concerned.

Relationship between Static and Dynamic Variables

Based on the results of the research in channeling funds to the community must carry out a policy principle in granting credit where the policy must be carried out in order to prevent bad credit, the credit granting policy includes the credit analysis stage until the time of repayment. With the right policy, it can assist management in maintaining the security of company assets and finding errors that can harm the company being managed. errors that can harm the company being managed.

Based on the relationship that has been found by previous researchers, the importance of the credit granting policy procedure system, the requirements for debtors and financial reports is very important to achieve the system and procedure for granting credit to prospective customers. Thus, this research is important and located in KUD Gampengrejo II.

Framework
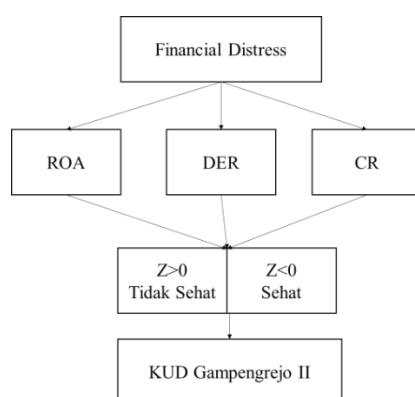
Financial Distress Analysis As An Effort To Find Out The Financial Condition Of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

RESEARCH METHODS

According to Sujarweni (2017) The type of research used is quantitative with a descriptive approach. This is because it is related to processing numerical data that is systematic, structured and has ideas related to financial reviews or data in nominal form. Implementation of nominal data used in rupiah units to be processed by credit analysis. The type of quantitative use is due to research instruments, how to analyse data with the object of research.

Location and Research Period

The research location to obtain the necessary data. This research was conducted KUD Gampengrejo II. The research location is the address: Jalan Erlangga, Paron, Ngasem, Ngasem, Kediri, East Java 64182. This research time starts from May-June 2022.

Population and Research Sample

Population is related to "objects that are generalised in order to be able to have the qualities and characteristics of a particular object" (Gumanti et al., 2018). The object is determined by the researcher so that conclusions can be drawn.This study has a population of activities related to KUD Gampengrejo II.

Data Source

The data sources in this study are divided into 2, That's:

1. Primary data is data obtained by researchers directly (from the first hand), related to quantitative data, namely the financial statements of KUD Gampengrejo II. Primary data is identical to the data discussed in this study.
2. Secondary data is data obtained by researchers from existing sources. Relating to literacy references, articles and sources to compile literature, theories and methods in the stages of research.

Data Collection Method

Documentation in this study as a step in knowing the documents needed in the study. The documents in this study used are the financial statements of KUD Gampengrejo for the period 2016, 2017, 2018, 2019, 2020 and 2021.
2021.

Interviews using data collection steps with question and answer communication to research subjects related to the history of KUD Gampengrejo II, organisational structure, credit granting policy procedures system, and the requirements of the debtor.

RESULTS AND DISCUSSION

Data Processing Results

1. Return on Asset (ROA)

Table 1. Nilai Return on Asset (ROA)

No.	Tahun	Laba Bersih	Total Aktiva	ROA	Predikat
1	2018	85,050,000	123,000,000	69.15%	Sangat Sehat
2	2019	88,650,000	129,000,000	68.72%	Sangat Sehat
3	2020	89,963,000	120,000,000	74.97%	Sangat Sehat
4	2021	99,070,000	110,000,000	90.06%	Sangat Sehat

Sumber: KUD Gampengrejo II, 2022

2. Debt to Equaty Ratio (DER)

Table 2. Nilai Debt to Equaty Ratio (DER)

No.	Tahun	Liabilitas	Total Aktiva	DER	Predikat
1	2018	163,500,000	123,000,000	132.9%	Aman
2	2019	166,000,000	129,000,000	128.7%	Aman
3	2020	169,280,000	120,000,000	141.1%	Aman
4	2021	172,580,000	110,000,000	156.9%	Aman

Sumber: Olah data KUD, 2022

Financial Distress Analysis As An Effort To Find Out The Financial Condition Of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

3. Return on Asset (CR)
Table 3. Nilai Return on Asset (CR)

No.	Tahun	Aset Lancar	Liabilitas	CR	Predikat
1	2018	91,700,000	163,500,000	56.1%	Sehat
2	2019	98,607,000	166,000,000	59.4%	Sehat
3	2020	99,920,000	169,280,000	59.0%	Sehat
4	2021	94,600,000	172,580,000	54.8%	Sehat

Sumber: KUD Gampengrejo II, 2022

4. Model Zmijewski
Tabel 4 . Model Zmijewski

No.	Tahun	ROA	DER	CR	Zmijewski
1	2018	69.1%	132.9%	56.1%	0.067
2	2019	68.7%	128.7%	59.4%	-0.155
3	2020	75.0%	141.1%	59.0%	0.270
4	2021	90.1%	156.9%	54.8%	0.492

Sumber: KUD Gampengrejo II, 2022

Pembahasan Hasil Penelitian

The results of the calculation of the assessment of the potential Financial Distress Zmijewski model, to see whether or not there is a difference in assessment between the potential Financial Distress models studied at KUD. Gampengrejo II period 2018-2021.
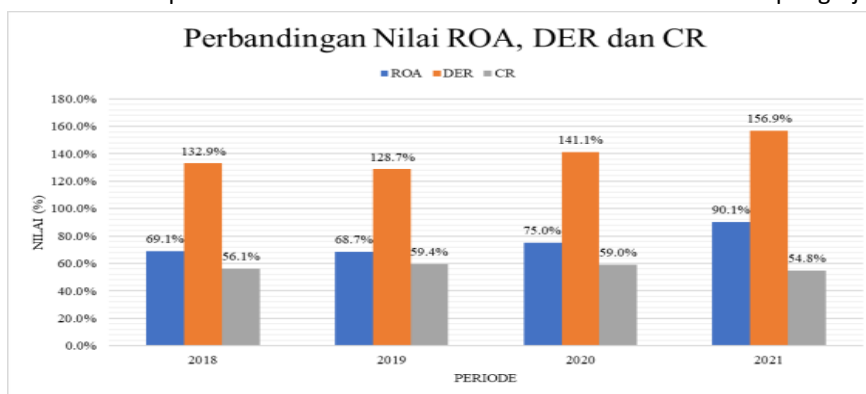

Figure 1. Comparison of ROA, DER and CR Values

The ROA value in 2018 was 69.1%, in 2019 it was 68.7%, in 2020 it was 75%, and in 2021 it was 90.1%. 75%, and in 2021 it was 90.1% The DER value in 2018 was 132.9%, in 2019 it was 128.7%, in 2020 it was 141.1%, and in 2021 it was 141.1%. 2020 was 141.1%, and in 2021 it was

156,9%

CR value in 2018 was 56.1%, in 2019 it was 59.4%, in 2020 it was 59%, and in 2021 it was 54.1%. 59% while in 2021 it is 54.8%

It is stated that the comparison of ROA, DER and CR for each year period is:

a. 2018 = ROA: DER:CR = 69, 1%: 132, 9%: 56, 1%

b. 2019 = ROA:DER:CR = 68,7%:128,7%,: 59,4%,

c. 2020 = ROA: DER:CR = 75%: 141,1%: 59%

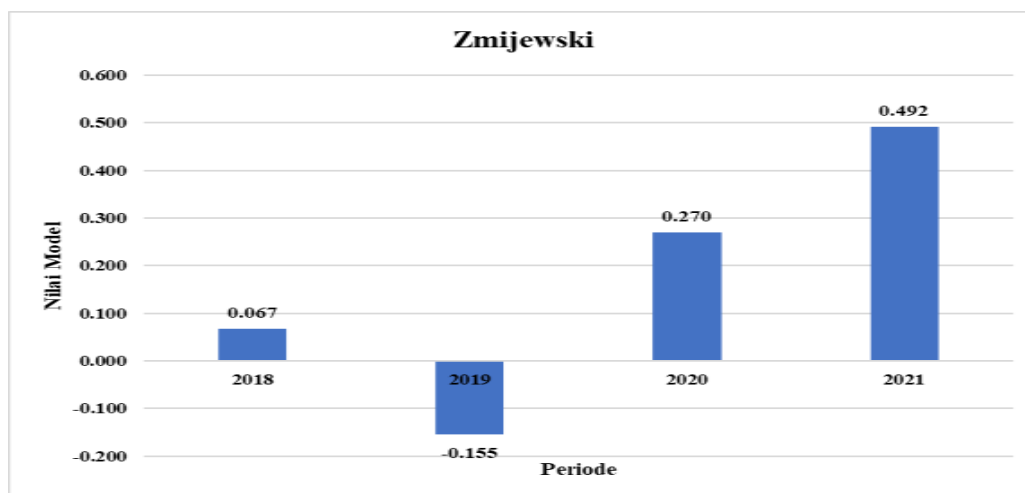d. 2021 = ROA: DER:CR = 90,1%, 156,9%, :54,8%

Figure 2. The value of the Zmijewski

Method the Amijewski model states that:

a. In 2018 the Zmijewski value is 0.067 or 0.067> 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy.

b. In 2019 the Zmijewski value is - 0.155 or -0.155 < 0, this means that the company is in a healthy financial condition and is not experiencing financial difficulties or is threatened with bankruptcy.

c. In 2020 the Zmijewski value is 0.270 or 0.270> 0, this means that the company is in financial difficulty or financial distress.

In 2021 the Zmijewski value is 0.492 or 0.492> 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The prediction of financial distress at KUD Gampengrejo in 2018-2021 in providing credit to customers has different results. In 2018 the Zmijewski value is 0.067 or 0.067> 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy. In 2019 the Zmijewski value is -0.155 or -0.155 < 0, this means that the company is in a healthy financial condition and is not experiencing financial difficulties or is threatened with bankruptcy. In 2020 the Zmijewski value is 0.270 or 0.270> 0, this means that the company is in financial distress. In 2021 the Zmijewski value is 0.492 or 0.492> 0, this means that the company is in an unhealthy financial condition and is at risk of bankruptcy.

SUGGESTION

This research requires a suggestion that can increase the capacity of future research. Suggestions for companies, namely the importance of maintaining a financial value, both from investment, value, and profitability margin to suppress the occurrence of Financial Distress.

REFERENCES

1) Amalia, S. et al. (2021). The Impact of Financial Ratio Indicators on Banking Profitability in Indonesia. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(8), 580–588 https://www.researchgate.net/publication/351095873_The_Impact_of_Financial_Ratio_I ndicators_on_Banking_Profitability_in_Indo nesia

2) Andesfa, D., & Masdupi, E. (2019). Effect of Financial Ratio on Profitability of Comercial Banks: A Systematic Literature Review. 64, 700–706. https://doi.org/10.2991/piceeba2- 18.2019.55

3) Anggraeni, A. A. P., & Sitorus, P. M. (2019). Analisis Komparasi Potensi Kebangkrutan Perusahaan Ritel di Indonesia Dengan Metode Altman Z-Score, Springate, dan Zmijewski. Jurnal Liquidity, Vol.8, No.1,(bankruptcy, Retail, Altman Z-Score, Springate, Zmijewski), 63–68.

4) Bala, R. P. (2017). Analisis Penilaian Terhadap Kesehatan BPR dengan menggunakan Faktor Camel Berdasarkan Peraturan Bank Indonesia. Jurnal Riset Manajemen & Akuntansi, 8(1), 1–18.

Financial Distress Analysis As An Effort To Find Out The Financial Condition Of (Studi Pada Koperasi Unit Desa Gampengrejo II Kabupaten Kediri)

5) BPSStatistik-Indonesia. (2019). Posisi Kredit Usaha Mikro, Kecil, dan Menengah (UMKM) Pada Bank Umum (Miliar Rupiah) Tahun 2016-2018. Www.Bps.Go.Id. https://www.bps.go.id/statictable/2018/06/2 6/2004/posisi-kredit-usaha-mikro-kecil-dan- menengah-umkm-sup-1-sup-pada-bank- umum-miliar-rupiah-2016-2018.html

6) Damajanti, A., Wulandari, H., & Rosyati, R. (2021). Pengaruh Rasio Keuangan Terhadap Financial Distress Pada Perusahaan Sektor Perdagangan Eceran Di Bursa Efek Indonesia Tahun 2015-2018. Solusi, 19(1), 29–44. https://doi.org/10.26623/slsi.v19i1.2998

7) Damayanti, S. (2021). Does the Analysis of Altman Z-Score Model, Zmijewski Model, and Springate Model Impact the Financial Distress? Proceedings of the 5th Global Conference on Business, Management and Entrepreneurship (GCBME 2020), 187(Gcbme 2020), 70–72. https://doi.org/10.2991/aebmr.k.210831.015

8) Desmawati, Kamaliah, & Wijaya, E. Y. (2016). Analisis Prediksi Kebangkrutan dengan Model Altman, Springate, Grover & Zmijewski pada Industri Manufaktur di BEI. Jurnal Tepak Manajemen Bisnis,VIII(2), 1– 19.

9) Dewi, M. K., & Anggono, A. H. (2013). The Analysis Of Credit Policy Development in Bank AAA (Case of Iomplementation New Policy Architecture). The Indonesian Journal of Business Administration, 2, No. 10(10), 1224–1233.

10) Edward Domina Attafuah, & Ackah, D. (2021). The Adoption of Credit Management Practices in Health Institutions: Evidence from the University of Ghana Health Servicec. Journal Impact Factor, 3(8), 01–18. https://damaacademia.com/fmeja/2021/08/0 7/the-adoption-of-credit-management- practices-in-health-institutions-evidence- from-the-university-of-ghana-health-service/

11) Efendhi, H. R., Laporan, A., Perusahaan, K., & Efendhi, H. R. (2019). Analisis Laporan Keuangan Perusahaan Dalam Kaitan Pemberian Kredit Kepada Calon Nasabah (Studi Kasus Pada PT.Bank Rakyat Indonesia Cabang Nabire Provinsi Papua). Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 7(3), 4144–4153.

12) Farhan, N. H. S., Tabash, M. I., & Yameen, M. (2020). The relationship between credit policy and firms' profitability: Empirical evidence from Indian pharmaceutical sector. Investment Management and Financial Innovations, 17(2), 146–156. https://doi.org/10.21511/imfi.17(2).2020.12

13) Gumanti, T. A., Moeljadi, & Utami, E. S. (2018). Metode Penelitian Keuangan (1st ed.). Mitra Wacana Media.

14) Husein, M. F., & Pambekti, G. T. (2015). Precision of the models of Altman, Springate, Zmijewski, and Grover for predicting the financial distress. Journal of Economics, Business & Accountancy Ventura, 17(3), 405. https://doi.org/10.14414/jebav.v17i3.362

15) Irmawati, I. (2019). Analisis Sistem dan Prosedur Kebijakan Pemberian Kredit Kepada Calon Nasabah pada PT. Bank Rakyat Indonesia (Persero), Tbk Cabang Dompu. Universitas Muhammadiyah Makassar.

16) Kamotho, J. M., & Njoka, C. (2022). Credit Lending Policies and Financial Performance of Islamic banks in Kenya. International Academic Journal of Economics and Finance, 3(7), 488–510.

17) Kholifah, N., Djumali, D., & Hartono, S. (2020). Mengukur Financial Distress Dengan Metode Grover, Altman Z-Score, Springate Dan Zmijewski Pada Pt Solusi Bangun Indonesia Tbk. Jurnal Ilmiah Edunomika, 4(02), 496– 508.https://doi.org/10.29040/jie.v4i02.1214

18) Koske, N. C., & Yegon, J. C. (2017). Strategic Conformity and Financial Distress Among Listed Firms In Nairobi Securities Exchange. International Journal of Economics, Commerce and Management United,V(9), 1– 18.

19) Mahmudi, M. (2010). Analisis Laporan Keuangan Pemerintah Daerah (3rd ed.). UPP STIM YKPN.

20) Mashudi, M., Himmati, R., Ardillah, I. F. R., & Sarasmitha, C. (2021). Financial Distress Prediction in Infrastructure, Utilities, and Transportation Sector Companies 2015- 2020. Jurnal Keuangan Dan Perbankan, 25(3), 656–670. https://doi.org/10.26905/jkdp.v25i3.5858

21) Melissa, P., & Banjarnahor, H. (2020). Analisis Prediksi Kebangkrutan Menggunakan Model Altman Z-Score, Springate Dan Zmijewski Yang Terdaftar Di Bursa Efek Indonesia. Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 8(1), 903–912.

22) Muzanni, M., & Yuliana, I. (2021). Comparative Analysis of Altman, Springate, and Zmijewski Models in Predicting the Bankruptcy of Retail Companies in Indonesia and Singapore. TIJAB (The International Journal of Applied Business), 5(1), 81. https://doi.org/10.20473/tijab.v5.i1.2021.81- 93

23) Nurkhofifah, Abdul Rozak, D., & Apip, M. (2019). Pengaruh Kredit Bermasalah Terhadap Profitabilitas Pada Perbankan Yang Terdaftar di BEI. Akuntapedia, 1(1), 30–41.

24) https://jurnal.unigal.ac.id/index.php/akuntap edia/index

25) Permatasari, D., Samsudin, A., & Komariah, K. (2019). ANALISIS FINANCIAL DISTRESS DENGAN METODE ZMIJEWSKI. Journal of Management and Bussines (JOMB), 8(5), 55.

26) Poerwanti, R., & Dewi Kartika, T. P. (2018). The Effect Of CAR, NPL & LDR On The Profit Improvement Of Regional Development Bank In Indonesia By Using Credit Growth As Intervening Variable (Research on Regional Development Banks in Java, Bali & NTT) Period 2011 – 2015. IJEBD (International Journal of Entrepreneurship and Business Development), 1(2), 188–201. https://doi.org/10.29138/ijebd.v1i2.564

27) Pramudya, N. (2018). Mengenal Koperasi Unit Desa (KUD) (2nd ed.). Pixelindo.

28) Prasetianingtias, E., & Kusumowati, D. (2019). Analisis Perbandingan Model Altman, Grover, Zmijewski Dan Springate Sebagai Prediksi Financial Distress. Analisis Perbandingan Model Altman, Grover, Zmijewski Dan Springate Sebagai Prediksi Financial Distress, 5(1), 1–3.

29) Prasetio, G., Nufi, H. M. A., Ristiani, D., & ... (2020). Analisis Atas Penerapan Sistem Pengendalian Manajemen Terhadap Pemberian Kredit Pada Pt. Bank Pengkreditan Rakyat Bandung. AKURAT| Jurnal Ilmiah …, 11(2), 8–15. http://ejournal.unibba.ac.id/index.php/akurat /article/view/310

30) Salamadian. (2020). Definisi Sampel Penelitian.

31) Saputri, H. A., & Krisnawati, A. (2020). International Journal of Multicultural and Multireligious Understanding Comparative Analysis of Modified Altman Z-Score , Springate , Zmijewski , Bankometer , Grover and RGEC Models for Financial Distress Prediction (Empirical Study in Banking Companie. International Journal of Multicultural and Multireligious Understanding, 7(4), 260–278.

32) Satriya, I. W. B., & Maisaroh, F. D. (2019). Analisis Tingkat Kesehatan Bank Perkreditan Rakyat Pt. Bpr Bali Partasedana Di Gianyar Bali. Jurnal Riset Akuntansi JUARA, 9, 1–23.

33) Siregar, A. P., Jamhari, & Waluyati, L. R. (2020). Koperasi Unit Desa di Daerah Istimewa Yogyakarta (1st ed.). Deepublish.

34) Subramanyam. (2018). Analisis Laporan Keuangan (11th ed.). Salemba Empat.

35) Sujarweni, V. W. (2017). Analisis Laporan Keuangan: Teori, Aplikasi & Hasil Penelitian (3rd ed.). Pustaka Baru Press.

36) Suparningsih, B., & Chaeriah, E. S. (2019). Perbandingan Prediksi Kebangkrutan Menggunakan Model Altman Modifikasi, Springate, Zmijewski Dan Grover Pt Ratu Prabu Energi Tbk. Jurnal Manajemen Bisnis Krisnadwipayana, 7(3). https://doi.org/10.35137/jmbk.v7i3.346

37) Suwandi, I. (2017). KUD dalam Perspektif Ekonomi Pedesaan (1st ed.). Deepublish.

38) Utari, E. W., Hadiana, M. H., & Dadi Suryadi. (2016). Analisis Finansial Kelayakan Usaha Sapi Perah Penerima Kredit usaha Rakyat. Jurnak Usaha Perternakan, 2(3), 1–20.

39) Wahyu Adi Priyanti, M., & Budi Riharjo, I. (2019). Analisis Metode Altman Z-Score , Springate , Dan Zmijewski Untuk Memprediksi Financial Distress. Jurnal Ilmu Dan Riset Akuntansi, 8.

40) Wezel, T., & Carvalho, N. (2022). The Financial Performance and Macrofinancial Implications of Large State-Owned Enterprises in Sub- Saharan Africa. International Monetary Fund, 22(56), 32.

41) Widyakto, A., Suhardjo, Y., & Ardiansari, A. (2021). Analysis of The Impact of NIM, LDR and NPL on Bank Profitability with Variable Mediating Firm Size (Empirical Study on Public Banks Listed on IDX in 2015-2019. Management Analysis Journal, 10(3), 257– 263.

42) Yunia, S. (2018). Analisis Rasio Keuangan Dengan Model Zmijewski (X-Score) Dalam Memprediksi Kebangkrutan Perbankan Syariah Di Indonesia