Abou Bakr Essedik KIDAOUENE
E-mail: Kidaouene.as@univ-tissemsilt.dz
Lecturer A, Laboratory of Modern Economic And Sustainable Development
University of Tissemsilt
Algeria
https://orcid.org/0009-0003-4130-6911

USING THE SPRINGATE PREDICTING MODEL BY THE AUDITORS TO ENHANCE THE ACCOUNTING PRINCIPLE "GOING CONCERN" at AOM INVEST GROUP FOR THE PERIOD 2019-2023

Abstract: *This study aims to determine the role of the auditor in enhancing the assurance of the extent to which the accounting principle of " Going Concern " is applied using the Springate forecasting model, so that our study is applied to the AOM Invest Group during the period 2019-2023. The reason for our choice of this company is because it is listed on the Algiers Stock Exchange and therefore its financial statements are characterized by transparency and accuracy, which helps us in using the Springate predicting model, which is considered one of the best models used by auditors in their practical procedures that aim to ensure the extent to which the accounting principle of " Going Concern " is applied. In this study, we use the deductive approach in order to analyze the theoretical concepts related to (the auditor, the accounting principle Going Concern and the Springate predicting model), and we also use the inductive approach in order to analyze the results obtained. The study concluded that the auditor has a vital role in enhancing the prediction of any event that may affect the achievement of the accounting principle " Going Concern " using the Springate model. The study also found that the AOM Invest Group faced difficulties during the years 2019 and 2020 due to the Corona pandemic and some political conditions that Algeria faced, while in the years (2021, 2022 and 2023) the group witnessed a noticeable improvement thanks to the continuous support of the Algerian state for economic companies.*

Keywords: *Auditors, Accounting Principle, Going Concern, Springate Model, AOM Invest.*

JEL classification: *C53, M 41, M 42.*

აბუ ბაქრ ესედიკ კიდაუენე
E-mail: Kidaouene.as@univ-tissemsilt.dz
ლექტორი ა, თანამედროვე ეკონომიკური და მდგრადი განვითარების
ლაბორატორია, ტისემსილტის უნივერსიტეტი
ალჟირი
https://orcid.org/0009-0003-4130-6911

SPRINGATE-ის პროგნოზირების მოდელის გამოყენება აუდიტორების მიერ ბუღალტრული აღრიცხვის პრინციპის „GOING Concern"-ის გასაუმჯობესებლად AOM INVEST GROUP-ში 2019-2023 წლების პერიოდისთვის

აბსტრაქტი: კვლევა მიზნად ისახავს აუდიტორის როლის დადგენას „Going Concern"-ის ბუღალტრული აღრიცხვის პრინციპის სპრინგიტის პროგნოზირების მოდელის გამოყენებით დარწმუნების გაღრმავებაში, ასე რომ, ჩვენი კვლევა გამოიყენება AOM Invest Group-ზე პერიოდი 2019-2023 წწ. ამ კომპანიის არჩევის მიზეზი არის ის, რომ ის არის ჩამოთვლილი ალჟირის საფონდო ბირჟაზე და, შესაბამისად, მისი ფინანსური ანგარიშები ხასიათდება გამჭვირვალობით და სიზუსტით, რაც გვეხმარება Springate-ის პროგნოზირების მოდელის გამოყენებაში, რომელიც ითვლება ერთ-ერთ საუკეთესო მოდელად. აუდიტორები თავიანთ პრაქტიკულ პროცედურებში, რომლებიც მიზნად ისახავს დარწმუნდეს, თუ რამდენად გამოიყენება "Going Concern" ბუღალტრული აღრიცხვის პრინციპი. ამ კვლევაში ვიყენებთ დედუქციურ მიდგომას, რათა გავაანალიზოთ თეორიული ცნებები (აუდიტორი, ბუღალტრული აღრიცხვის პრინციპი Going Concern და Springate პროგნოზირების მოდელი), ასევე ვიყენებთ ინდუქციურ მიდგომას მიღებული შედეგების გასაანალიზებლად. კვლევამ დაასკვნა, რომ აუდიტორს აქვს სასიცოცხლო როლი ნებისმიერი მოვლენის პროგნოზირების გაღრმავებაში, რომელმაც შეიძლება გავლენა მოახდინოს ბუღალტრული აღრიცხვის პრინციპის მიდწევაზე "Going Concern" Springate მოდელის გამოყენებით. კვლევამ ასევე დაადგინა, რომ AOM Invest Group-ს 2019 და 2020 წლებში შეექმნა სირთულეები კორონას პანდემიისა და გარკვეული პოლიტიკური პრობების გამო, რომლებიც ალჟირს შეექმნა, ხოლო წლებში (2021, 2022 და 2023) ჯგუფმა შესამჩნევი გაუმჯობესება შეინიშნებოდა. ალჟირის სახელმწიფოს უწყვეტი მხარდაჭერა ეკონომიკური კომპანიებისთვის.

საკვანძო სიტყვები: აუდიტორები, ბუღალტრული აღრიცხვის პრინციპი, Going Concern, Springate Model, AOM Invest.

JEL კლასიფიკაცია: C53, M 41, M 42.

Introduction and review of literature

The modern business environment has become very complex in order to keep up with the most important developments in various economic processes, which may cause severe difficulties for economic companies, up to the point of bankruptcy, which is inconsistent with the ultimate goal of the company, which is continue the activity for a longer period (KIDAOUENE, 2024).

Achieving the requirements of the accounting principle 'going concern', which is the opposite of bankruptcy, requires constant vigilance and effort on the part of the company's leaders.

Various determinations of the sources (such as websites, academics, databases, professional organizations and standard-setters) and scopes (such as academic advancements, practical issues) of research are considered in the definition of the going concern (Lombardi, 2021), it states that the company will be a going concern for a long time to come (Schuler, 2023).

In order to ensure that the accounting principle of 'going concern' is respected, the auditor is one of the actors who have the right to ensure that it is respected, as stipulated in the standards governing his work.

The auditor's reason for doing the above is due to International Standards on Auditing, which demand auditors to give a reasonable assurance that there are no major misstatements in financial statements, whether as a result of fraud (intentional) or mistakes (inadvertent) (Velte, 2023).

Among the mechanisms used by the auditor to ensure that the principle of 'going concern' is applied, prediction models, including the Springate model, are among the most important models used for the early detection of any threat to the continuity of the company.

The scope of our study is to project the study variables to the AOM Invest Group during the period 2019-2023.

The main objectives of the study are as follows:
- ✓ Explain how an auditor can use the Springate model to predict any risk to the continuity of the organisation;
- ✓ Analyze the continuity of the study company using the Springate model;
- ✓ Make recommendations to AOM Invest Group in the event that our findings indicate a risk to the company's continuity.

In order to elaborate on the aspects of the study, we can pose the following problematic:

What is the role of the auditor in promoting the accounting principle "going concern" using the Springate predicting model at AOM Invest Group during the period 2019-2023?

In order to answer the study problematic, we put forward the following two hypotheses:
- ✓ H_0: The auditor does not contribute to the enhancement of the accounting principle "going concern" using the Springate predicting model at AOM Invest Group during the period 2019-2023;
- ✓ H_1: The auditor contributes to the enhancement of the accounting principle "going concern"using the Springate predicting model at AOM Invest Group during the period 2019-2023.

There are many previous studies that addressed the variables of our study (Auditors, Going Concern and Springate predicting model), which help us enrich our study and support us in detailling the literature review, where some studies mention each variable alone, while others explain the relationship between all the study variables,we will mention the most important of

them:
- ✓ Study of (Ege et al., 2025), this study evaluates the overall effects of 110 media-covered "negative events" that harmed the reputation of auditors for the U.S. Big Four between 2007 and 2019. In general, the findings indicate that investors' opinions of the Big Four firms' audit quality and their capacity to draw in and keep clients are only slightly impacted by unfavourable occurrences that receive media attention;
- ✓ Study of (Hung et al., 2024), this study examines the relationship between income smoothing behaviour and auditor industry specialization (AIS) in Chinese listed firms. The findings, which were derived from a sample of 27,208 firm-year services from 2006 to 2018 that were gathered from the Taiwan Economic Journal Database, show a negative correlation between AIS and directors' income smoothing behaviour, highlighting the significance of industry knowledge in preventing such activities. Furthermore, an independent t-test reveals how Big Four auditors differ from non-Big Four auditors in their ability to influence client companies' income smoothing practices. The study also shows that Big Four auditors significantly moderate the relationship between client companies' income smoothing and accounting companies with the highest industry expertise, which reflects the peculiarities of the Chinese market;
- ✓ Study of (Chi & Pan, 2022), this study uses audit input data from Japan to investigate how auditors react to accounting restatements. According to the study's findings, firms in the restatement year had more signing partners, audit fees, and certified public accountant (CPA) licensed staff than they did in the year before the restatement;
- ✓ Study of (Karim & Shetu, 2023), this study aims to examine if the pandemic has made the going concern difficulty (GCP) worse for firms in Bangladesh's developing economy, specifically for textile companies that are listed between 2016 and 2021. According to the study, compared to bigger, unlevered enterprises, small, leveraged firms are more vulnerable to pandemic-related going concern issues;
- ✓ Study of (Owais & Abu Fadda, 2022), the goal of this study is to examine how carefully adhering to the going concern assumption (GCA) is likely to improve an entity's capacity to endure the COVID-19 pandemic and its effects on companies listed on the Jordan Exchange. where The study's only advise is to strictly adhere to the rules that govern any profession or occupation, particularly accounting;
- ✓ Study of (Shalih & Kusumawati, 2019), the purpose of this study is to compare the forecasts of financial hardship made by the Fulmer and Springate models for industrial companies that were listed on the Indonesian stock exchange between 2014 and 2016. The findings demonstrated that when it comes to forecasting financial trouble, the Springate and Fulmer models differ significantly. The Springate model is the best applicable model in this study for forecasting financial trouble;
- ✓ Study of (Sazly et al., 2024), the researchers examined the financial situation of PT Sepatu Bata Tbk from 2018 to 2023 using S-Score values and financial ratio data. The findings indicate a sharp decline in the company's performance during that time, with financial issues beginning in 2019 and getting worse until 2023;

✓ Study of (Proho, 2023),the regulatory structure based on International Financial Reporting Standards and International Standards on Auditing is carefully examined in this study. It examines in particular the function and importance of auditors in evaluating the going concern assumption, including an examination of the variables affecting the auditor's judgement and a response to objections made to auditors. The study also examines previous experiences in creating models for assessing going concern assumptions, which could help forensic accountants find anomalies in financial statements because of the link between increased bankruptcy risk and fraudulent activity. According to the study's primary conclusion, auditors are essential to this process because they use a variety of approaches, including as discriminant analysis, ratio analysis, and machine learning, to determine the entity's likelihood of continuing to operate.

The most important thing that distinguishes our study from previous studies is that our study combined three variables (Auditor, Going concern principle and the Springate predicting model), in addition to the fact that previous studies were not applied in Algerian companies, unlike our study, which is applied to the Algerian Group « AOM Invest ».

Methodology

Study sample

AOM INVEST spa is a public-private investment group specializing in the study and development of top-class tourist destinations. The AOM INVEST Group is made up of several subsidiaries (AOM Study and Training, AOM Development, AOM Exploitation, AOM Construction, AOM Equipment, AOM Travel and AOM Capital). Each subsidiary has its own identity and has always able to develop its core business. This group joined the Algiers Stock Exchange in late 2018(AOM Invest website, n.d.).

Model of study

There are many predicting models used by the auditor, but in this study we will use the Springate model to ascertain the extent to which AOM Invest Group will be able to continue its acivities during the period 2019-2023.

The Springate model is a modified Alt-man model constructed using multiple discriminant analysis(Saha & Ahmed, 2024), this model was created in 1978 and chose four ratios from a list of 19 widely used financial ratios. These ratios are working capital to total assets, sales to total assets, EBIT to total assets, and EBIT to current liabilities(M.Salim & Ismudjoko, 2021). The Springate score combines a number of widely used financial ratios with varying weights to forecast a company's likelihood of surviving(Supitriyani et al., 2022), the mathematical formula for this model is(Kembi et al., 2024):

$$S\text{-}Score = 1{,}03\ X1\ +\ 3{,}07\ X2\ +\ 0{,}66\ X3\ +\ 0{,}4\ X4$$

The financial ratios related to each X are as follows(Gunanto, 2023):

X1: Working capital / total asset
X2: Earnings before taxes / total asset
X3: Earnings before taxes / current liabilities
X4: Sales / total asset

The Springate model values are interpreted as follows:
- ✓ If the S value is less than 0.862, it can be concluded that the company may go bankrupt(Yohana Carla, 2023);
- ✓ The company can be categorised as being in a safe zone and not at risk of bankrupt if its S value is greater than 0.862(Dwiningsih et al., 2023).

Results

In order for the auditor to ascertain the viability of the company, the auditor must calculate the S values of the Springate model, as these values will indicate whether the group is at risk of bankruptcy (Inability to continue) or not at risk of bankruptcy (Ability to continue), a set of operations must be performed.

Extracting the elements that make up financial ratios

In order to calculate the S-Score values, the elements that make up the financial ratios must be extracted from the group's financial statements,the following table shows the amounts of the elements in Algerian dinars (1 US dollar = 135 Algerian dinars):

Table1. Extracting the elements that make up financial ratios

Years	2019	2020	2021	2022	2023
Working Capital	119 564 966	460 371 953	532 566 875	547 101 167	565 216 870
Total Asset	430 592 957	780 677 284	867 449 227	889 558 899	893 647 975
Earnings Before Taxes	1 071 265	3 893 163	22 223 393	25 105 161	30 075 380
Current Liabilities	9 423 109	11 122 344	26 782 170	35 359 406	21 495 480
Sales	6 935 504	7 690 267	77 026 790	73 222 738	79 397 038

Source**:** Prepared by reseacher according to the financial statements of company

Calculate the financial ratios

After extracting the values of the constituent elements of the financial ratios from the company's financial statements during the period (2019-2023), we calculate the X values shown in the following table:

Table 2. X values

X values over the years	2019	2020	2021	2022	2023
X1	0.277	0.589	0.613	0.645	0.632
X2	0.002	0.004	0.025	0.028	0.033
X3	0.113	0.350	0.829	0.709	1.399
X4	0.016	0.009	0.088	0.082	0.088

Source: Prepared by researcher based on the results of Table No.1

Calculate the S values

After calculating the financial ratios, we calculate the S-Score for the Springate model, which are shown in the following table:
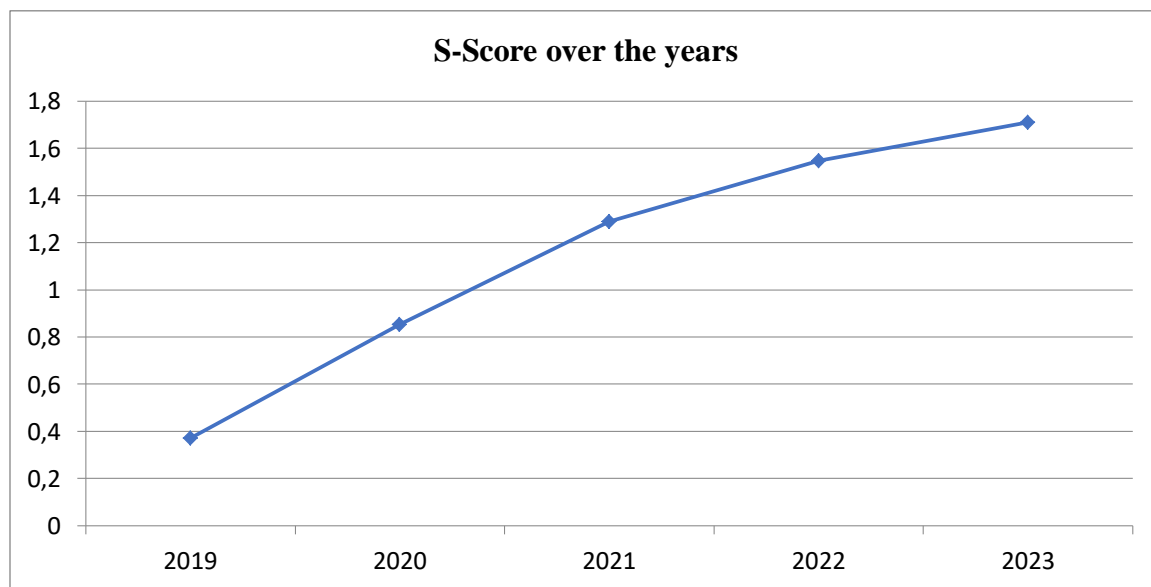
Table 3. S-Score

S-Score over the years	2019	2020	2021	2022	2023
S-Score	0.372	0.853	1.290	1.546	1.710

Source: Prepared by researcher based on the results of Table No.2 & Springate model

To further explain the S-Score, the following figure shows the following:

Figure1. S-Score over the years

Source**:** Prepared by researcher based on the results of Table No.3

Through the results of Table No. 3 and the curve of Figure No. 1, we note the following:

✓ S-Score in 2019 and 2020 is less than 0.862, this results according to the Springate model, means the AOM Invest Group is threatened with bankruptcy, accordingly that the accounting principle "going concern" cannot be applied. The reason for this is that Algeria witnessed very difficult political conditions during 2019 and conditions related to the Corona pandemic during 2020, which affected the results of the AOM Invest Group;

✓ S-Score during the years (2021, 2022 and 2023) is more than 0.862, which means that the institution is not threatened by the risk of bankruptcy (the accounting principle of

going concern is applied) according to the Springate model, and this result is due to the efforts made by the Algerian state through accompaniment and providing all facilities to Algerian companies affected by the Corona pandemic.

Conclusions

The most important results reached in this study are as follows:
- ✓ The accounting principle of " going concern " is considered one of the most important accounting principles that all companies seek to apply;
- ✓ The auditor has a very important role in the company, as he provides advice and guidance to those in charge of the company, which contributes to enhancing the application of the accounting principle " going concern ";
- ✓ The Springate model is considered one of the most important forecasting models used by the auditor to ensure the extent of application of the accounting principle "going concern", because its results are very accurate and reliable;
- ✓ AOM Invest Group is one of the most important Algerian institutions in the field of tourism. It is a group listed on the Algiers Stock Exchange;
- ✓ During the years 2019 and 2020, the AOM Invest Group experienced some difficulties due to the political circumstances and the Corona pandemic that Algeria witnessed, and this was clearly evident through the results obtained below 0.856 according to the Springate model;
- ✓ From the results obtained, we accept hypothesis H1 and reject hypothesis H0.

Based on the results obtained, we can make some recommendations to those in charge of managing the AOM Invest Group, which are as follows:

- ✓ The recommendations made by the auditor must be implemented, which contribute to early detection of any risk threatening the continuity of the AOM Invest Group, must be implemented;
- ✓ Signing partnership agreements with foreign institutions in the same field of specialization as AOM Invest Group, which will have a positive impact on the annual financial results of the group, and which will provide sufficient protection for the institution from the risk of bankruptcy (avoiding failure to achieve the accounting principle going concern).

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