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The effects of COVID-19 on conditional accounting conservatism in developing countries: evidence from Jordan

Laith Akram Al-Qudah[1]*, Hanan Ahmad Qudah[2], Aiman Mahmoud Abu Hamour[1], Yazan Abu Huson[3] and Mohammad Zakaria Al Qudah[4]

Abstract: The purpose of this study was to look at the impacts of COVID-19 on the Jordanian banking industry and how it affects the use of the conditional accounting conservatism concept. This study's sample consists of 16 banking institutions listed on the Amman Stock Exchange (ASE) and 64 observations from December 2018 to July 2021. A multiple linear regression model was used to evaluate the hypotheses, and the results show that COVID-19 had a substantial beneficial influence on conditional conservatism in the Jordanian banking industry over this period. Furthermore, when uncertainty grows, the function of conservatism becomes more significant, as more trustworthy accounting information allows investors to properly judge a company's past and future performance. The research suggests that the relevant authorities offer instructions for accountants that may be used in practice to attain the appropriate degree of accounting conservatism, under international standards and local laws and regulations. The current study is the first to be conducted in a developing nation, such as Jordan, and the findings may be useful to other developing nations.

Subjects: Business, Management and Accounting; Accounting; Business History; Corporate Governance

Keywords: conditional conservatism; COVID-19; bank sector; Jordan

JEL codes: M41; D21; E0; E52; G20.

1. Introduction

Accounting conservatism is an essential method of revenue management that harnesses the power of accounting regulation. Wimalawansa (2020), and Donthu and Gustafsson (2020) suggest that the phenomenon of increasing accounting conservatism in financial reporting during the global financial crises is one of the most controversial issues in contemporary accounting theory. Provides evidence that this is despite criticism of the company for failing to meet certain qualitative requirements regarding its accounting information (i.e. neutrality, accuracy, and relevance). In particular, the development of the fair value concept and its use by professional bodies in developing updated accounting standards (Jackson, 2021).

Academic and professional interest in accounting conservatism increased at the turn of the 20th century after the bankruptcies of several large global corporations, including Enron in 2001 and TESCO in 2016 (Aldomy et al., 2022). One of the reasons these companies failed was

management's opportunistic behaviour and lack of commitment to conservative accounting (Kebede et al., 2020). This raised questions about the quality of reported accounting earnings and the extent to which financial reporting is reliable in honestly representing the company's performance and financial position (Abuhussein et al., 2021). Accounting conservatism has become a major theme in accounting theory after the failure of major global corporations (Yaseen & Omet, 2021). Accounting conservatism includes distorted financial reporting metrics that may not reflect high-quality profitability, thus creating a conflict between boards, ownership, organizational characteristics, and accounting conservatism. Relationships have become ambiguous (Abu-Mater et al., 2020).

During market downturns, investors become more risk averse, rely more on fundamental information, and view other information as fussy and speculative as market risk and uncertainty increase. Therefore, during the COVID-19 pandemic, the quality of accounting information in accounting records and audit reports has become increasingly important to investors and markets, and conditional accounting conservatism has addressed this need (Cui et al., 2021). As a result, one of the most important aspects of financial reporting is the conservatism of conditional accounting. Conservative concepts such as inventory depreciation or market accounting and depreciation accounting for intangible and physical assets are common in accounting standards (Zhong & Li, 2017). Conditional conservatism is also characterized as an asymmetric cost-benefit sensitivity because it dictates immediate recognition of anticipated economic costs while deferring recognition of expected benefits until verified. (Kim & Zhang, 2016). Contractual and ability to monitor concerns generate conditional conservatism because conditional conservatism compels management to divulge missing knowledge that they are more hesitant to reveal immediately, so easing reported earnings (Giner & Mora, 2019). Conditional conservatism lowers asymmetric information between managers, potential shareholders, and other parties involved, allowing them to generate more realistic estimates of future earnings before and after COVID-19 (Ruch & Taylor, 2015).

Conditional accounting conservatism guarantees that costs from adverse economic occurrences are integrated into earnings as quickly as feasible, but predicted benefits from positive macroeconomic occurrences are freely acknowledged by managers through accounting information remarks, teleconferences, and large consulting (Guay & Verrecchia, 2018). By minimizing managers' reported earnings, forcing prompt disclosure of positive and negative current events, and creating complicated statistics that serve as a baseline for those other marketplace kinds of data and information, conditional conservatism enhances the firm's overall information climate (Lara et al., 2020). Conditional conservatism offers stockholders and the director's board early warning indicators concerning the profitability of the company by compelling management to identify and abandon unproductive ventures (Penalva & Wagenhofer, 2019). As a result, conditional conservatism helps companies implement better risk management practices by requiring prompt disclosure of risks and increased external oversight by stakeholders and shareholders (Anis & Utama, 2016). The whole world is facing the corona pandemic, affecting all its institutions (public and private), especially banks, and many countries affected by this crisis (Lucchese & Pianta, 2020). Therefore, the main objective of this study is to examine the impact of his COVID-19 on Jordanian banks listed on the Amman Stock Exchange (ASE) and its impact on the enforcement of conditional accounting conservatism.

This study contributes to the COVID-19 pandemic investigation of conditional accounting conservatism by using a sample of Jordanian banks that has several advantages over other samples. His Covid-19 epidemic in Jordan is explained in more detail as Jordan is rapidly spreading and is currently one of the few countries where the Covid-19 outbreak is largely uncontrolled. Additionally, this study adds to the knowledge of the information usefulness of conditional conservatism. However, the findings of this study have implications for accounting standard setters, regulators, and policymakers. Prudence (conservatism) has just been reintroduced into the conceptual framework of the International Accounting Standards Board (IASB). The study results show

that conservatism has a positive impact on capital markets and generates large economic returns during market crashes.

The remainder of this paper is organized as follows: section 2 reviews the literature; section 3 presents research data, population, model, and methods; results are provided in Section 4, and Section 5 concludes the paper.

2. Literature review

Accounting conservatism is one of the fundamental basic principles of accounting that has emerged alongside the development of accounting itself and remains of interest to researchers in many studies due to its significant influence on determining business results and the financial status of companies. Cerqueira and Pereira (2020) argue that several previous studies have dealt with many aspects of accounting conservatism in terms of various factors affecting it, such as the size of the company, the company's activities, the financial markets in which a company is registered, the accounting standards used, and many other factors that affect the level of accounting conservatism. Due to the different accounting treatment of companies affiliated with the financial sector, namely banks and insurance companies, these studies have been used when measuring accounting conservatism and the factors affecting the data of non-financial companies. While some previous studies used bank data to measure conditional accounting conservatism in financial institutions, this was insufficient for the banking sector, despite the fact that they perform procedures that are critical to a country's economy. Banks engage in a unique set of activities; thus special accounting treatments are required for these activities, resulting in financial reports with distinct components and content.

2.1. Conditional conservatism prior to Covid-19

We discovered while reviewing previous studies that one subset of these studies was also interested in researching the phenomenon of accounting conservatism. According to Al-Otaibi et al. (2015)'s research, the levels of conservatism in the private sector are higher than those in the public sector, owing to the various bodies in charge of financial control. Qudah and Al-Kubaisi (2016) investigate the determinants influencing accounting conservatism, focusing on accounting measurements and financial statements. The study indicates that the forced implementation of accounting principles, financial analysis, or accounting conservatism had no statistically significant impact on profits prior to the actual adoption and implementation of accounting standards, income statements, or accounting conservatism.

Considering the relevance of the indications offered by conditional accounting conservatism assessment in profit accuracy, disclosure forms quality, and conformity with accounting principles, Arab stock market analysts have given inadequate attention to the issue till the present (Al-Hroot et al., 2019). Accounting conservatism is a significant method used to restrict earnings utilizing the alternatives offered by accounting rules, according to Almutairi and Quttainah (2019). Conditional accounting conservatism, on the other hand, helps to avoid the confusing challenges that come when assessing real or accrued reported earnings (Chen et al., 2018).

Several studies, however, have realized that the trend of continuing to increase accounting conservatism in financial statements following the global economic crisis is among the most essential and controversial issues confronting current accounting ideas, and it has emerged as a subject of academic accounting interest in the study. Despite strong criticisms for its incompatibility with several qualitative features of accounting system quality (such as impartiality, accurate representation, and relevance), it remains a leader in the area (Atik et al., 2018; Khan & Lo, 2019). Muttakin et al. (2019) observed that management has stronger motivations to keep negative news under wraps while swiftly revealing positive news to investors because good news releases allow management to stay in their positions and improve their wealth, both of which are connected to company value. Bad news leaks, on the other hand, might result in rapid dismissal and capital loss for management. Conditional accounting conservatism, according to El-Habashy (2019), is crucial

in restricting managers' exploitative corporate accounting attitudes and lowering their capacity to manipulate and inflate accounting profitability.

2.2. Conditional conservatism during Covid-19

Another group of previous studies, such as those of Benkraiem et al. (2021) and Said, 2019), have highlighted international financial reporting standards (2019). According to Benkraiem et al. (2021), there is a decrease in earnings quality following the adoption of IFRS because the fair value causes a fluctuation and an improvement in the reliability of earnings quality, whereas Said (2019) claims that the adoption of IFRS has a positive effect but is insignificant in terms of earning management. The third set of studies, on the other hand, has concentrated on the global COVID-19 pandemic. According to Bahrini and Filfilan (2020), the extent to which confirmed COVID-19 instances and deaths had a sign on the daily rates of return of the substantial indices of stock markets in the Gulf Cooperation- operation Council (GCC) nations from April 1 to 26 June 2020, whereas the initial reaction to the maximum population of COVID-19 situations is non—significant.

Furthermore, Jin et al. (2020) discovered that levels of conservatism are high due to banks' organizational memory of difficult times and macro-level banking during and after the crisis period. According to Zhang et al. (2020), corporations' reporting methods are critical for gaining a deeper understanding of current capital market responses to the ongoing COVID-19 pandemic. Accounting conservatism reduces the risks of corporate performance deterioration and is an appropriate tool for dealing with the uncertainty faced by accountants. Some studies, such as that of Balakrishnan et al., have emphasized the importance of accounting conservatism when preparing financial statements during financial crises (2016).

Haider et al. (2021) studied managerial ability and accounting conservatism, they found that conditional conservatism has the potential to provide investment decision-makers with high-quality financial information in the Covid-19 period. Simply put, high-quality financial information is devoid of measurement errors. The estimated difference between the calculated and true values is defined as measurement error in general. High-quality financial information could aid in reducing information asymmetry. On the other hand, Cui et al. (2021) tried to discuss accounting conservatism and firm performance during the COVID19 pandemic. They showed that conditional accounting conservatism can lessen information asymmetry in firms that are classified as having higher information asymmetry. The same is true for conditional accounting conservatism, which can reduce information asymmetries, a deterrent to investment. Therefore, it can be argued that the level of FDI may also rise as the quality of financial information rises (conditional accounting conservatism). For instance, it has been argued that FDI and conditional accounting conservatism have a strong positive relationship.

Furthermore, Khalilov and Osma (2020) illustrated the new information in conditional conservatism depending on the business environment. Conditional conservatism typically demands that economic losses be acknowledged earlier than economic gains. According to Lara et al. (2020), we can avoid using any of the conventional accrual-based earnings management proxies by measuring conditional conservatism about good vs. bad news. Even though it is realized by classifying positive news events as gains under a higher verification standard than that used to classify negative news events as losses, an accrual-based measure may not always reflect conditional conservatism.

In other views, Khalil Abdo et al. (2021) showed that conditional conservatism necessitates the occurrence of specific events, which leads to faster recognition of economic losses. When there are periodic financial crises in the global economy, it is clear how important conditional accounting conservatism is. These crises frequently cause many businesses to face bankruptcy, raise agency costs, and cause many managers to manipulate or alter true profits by taking advantage of confidential information they possess about businesses. As a result, sound accounting practices reduce the risk of information and agency risks.

To conclude, while previous research into conditional accounting conservatism in Jordanian companies has revealed a paucity of evidence, additional studies have been done in countries such as the United States, the United Kingdom, and other European Union members. Beaver discussed the five primary accounting disciplines as well as recent research projects. Earnings management, quality accounting profits, company governance, quality audits, contractual connections, and litigation were among the topics discussed. The majority of Beaver's topics are related to accounting conservatism measurement, and there is a need for additional research in this field of science regarding Jordan in particular. The impact of COVID-19 on accounting conservatism in Jordanian commercial financial institutions is an important consideration when determining the level of accounting conservatism required maximizing bank profitability. Accounting conservatism is critical for the protection of investors, creditors, and capital owners because accounting data is used as a major foundation for investment and credit decisions by investors, users of accounting information, shareholders, and other parties.

Informed by the research of previous and theoretical studies related to the subject of this research, and based on the research question and its objectives, this study is based on the following hypotheses:

H_{01}: Jordanian commercial banks did not adopt the concept of conditional accounting conservatism for accounting profits prior to the COVID-19 pandemic (2019–2018).

H_{02}: Jordanian commercial banks did not adopt the concept of conditional accounting conservatism for accounting profits during the COVID-19 pandemic ((2020–2021.

H_{03}: There is no difference between the level of conditional accounting conservatism for accounting profits in Jordanian commercial banks during the COVID-19 pandemic and the level of conservatism in the pre-pandemic period.

3. Methods

This study empirically examines the effects of the COVID-19 pandemic on accounting conservatism in the Jordanian banking sector. The approach used in this study is the positive (empirical) approach, since this study, as with the positive approach, deals with prediction and explanation. An inductive approach will be used to cover the theoretical aspects of the research. A descriptive and analytical approach will be used to conduct the applied study to test the study hypotheses and form conclusions.

In this study, primary data and secondary data were gathered. The primary data was taken from the annual financial reports of Jordanian banks for the period between 2018 and July 2021. The secondary data was collected from Arabic and English books and articles published in journals, and the daily bulletins of the Amman financial market. The study population consists of all the Jordanian banks (a total of 16) and their shares traded on the Amman Stock Exchange in the period between 2018 and July 2021 (Amman Stock Exchange, www.exchange.jo). Table 1 shows the sample included in this study.

3.1. Research model

The Basu (1997) model will be relied upon to measure the effects of COVID-19 on conditional accounting conservatism in the banking sector in Jordan. Basu's model for measuring conditional accounting conservatism is based on studying the relationships between accounting profit and each price and stock return, focusing on the informational content of both earnings and stock market prices. The Basu (1997) model relies on the reverse regression of the equation of Beaver et al. (1980), which is based on the use of market returns signals as a representation of good and unpleasant news, so the establishments are differentiated according to the revenue they achieve. This is evidenced as a function through the following regression:

Table 1. Public Shareholding companies—Banking sector (The study sample)				
No.	**Company No.**	**Reuters Code**	**Company Name**	**Registration Date**
1	113,023	ARBK	Arab Bank	1930
2	111,033	AHLI	Jordan Ahli Bank	1955
3	111,006	SIBK	Safwa Islamic Bank	1963
4	111,022	BOJX	Bank Of Jordan	1963
5	111,021	CABK	Cairo Amman Bank	1964
6	111,020	SGBJ	Societe Generale De Banque Jordanie	1965
7	111,004	THBK	The Housing Bank For Trade and, Finance	1973
8	111,002	JOKB	Jordan Kuwait Bank	1976
9	111,003	JCBK	Jordan Commercial Bank	1977
10	111,001	JOIB	Jordan Islamic Bank	1978
11	111,005	AJIB	Arab Jordan Investment Bank	1978
12	111,007	UBSI	Bank Al Etihad	1978
13	111,014	INVB	Invest Bank	1982
14	111,009	ABCO	Arab Banking Corporation (Jordan)	1989
15	111,017	EXFB	Capital Bank Of Jordan	1995
16	111,201	IIAB	Islamic International Arab Bank	1997

Source: Central Bank of Jordan, 2021

$$Xit \ /Pit-1 = \ a0 + \ (a1 \times Rit) \ + \ (a2 \times DVit) \ + \ (a3 \times (Rit \times DVit)) \ + \ e$$

Explanation:

- $Xit \ /Pit\text{-}1$ = earnings per share divided by the share price in the opening (t) interval.
- a0,1,2, and 3 = the regression coefficients for the independent variables.
- $RVit$ = dummy variable (0 for positive return, 1 for negative return)
- Rit = share return
- e = error

In this study, the Basu (1997) model was modified with the inclusion of one additional dummy—that of the COVID variable—to the original model; thus, the modified Basu model used in this study is presented as follows:

$$Xit \ /Pit-1 = \ a0 \ + \ a1 \ Rit + a2 \ DVit \ + \ a3(Rit \times DVit) + \ a4 \ COVIDit-1 + a5 \ COVIDit-1 \times Rit \ + \ a6 \ COVIDit-1 \times DVit \ + \ a7 \ COVIDit-1Rit \times DVit \ + \ e$$

Explanation:

- $Xit \ /Pit\text{-}1$ = earnings per share divided by the share price in the opening (t) interval.
- $RVRit$ = interaction feature through ($RVit \ \times \ Rit$)
- COVID = Dummy variable (0 for prior to COVID effect, 1 for after COVID effect)

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- COVIDRVit = interaction feature through (COVID × RVit)
- COVIDit = interaction feature through (COVID × Rit)
- COVIDRVRit = interaction feature through (COVID × RVit × Rit)
- e = error

The modified Basu (1997) model will be used to measure the extent of the difference between the levels of accounting conservatism after the onset of COVID-19 in March 2020, and those prior to the pandemic, that is, prior to March 2020 (Epstein et al., 2010). This variable will be measured using the two-way measurement method, where the variable is given a value of 1 for the period during the pandemic, and a value of 0 for the period prior to the pandemic. This will indicate the extent of the differences in the levels of accounting conservatism for banks as a whole, not just those observed prior to and during the COVID-19 pandemic.

3.2. Measuring variables

3.2.1. Dependent variable
The dependent variable is earnings (Xit/Pit-1). The earnings variable (Xit) measures the earnings per share (EPS) of the company (i) at the end of the period (t), divided by the stock price at the beginning of the period (Pit-1). In addition, to eliminate the effects of the difference in share price caused by the difference in the face value of each corporation on earnings per share, it is necessary to divide profit by price.

3.2.2. Independent variables
The market return per share is the state of bad news compared to the impact of the market return per share in the state of good news (Rit × DVit). It expresses the annual earnings per share of the corporation (i) at the end of the period (t). The annual earnings per share at the end of each year are calculated by a formula, where (Pit) represents the share price, and (Dit) represents the cash dividends per share during the year. In the case of negative returns, this means that the market received bad news and dealt with it immediately prior to the earnings report, while positive returns mean that the news the market received during the period is good. The binary measurement of news is used here. If the return sign at the end of the time (t) is negative, then the news that the market receives during the period is considered entirely bad, and in this case, the variable is given a value (1). But if the return sign is positive or the return is zero at the end of the period, then it is assumed that the news received by the market is considered entirely positive and the variable is given a value of 0.

4. Findings and discussions

4.1. Normality tests
In statistics, one of the conditions for the validity of the generalized linear model (GLM) is that the values of the observations follow the normal distribution, and if this condition is not met, the natural logarithm or its square root—as well as other procedures—are used to process the data. Based on the results of the Jarque-Bera test, the data follows the normal distribution, and the results are presented in Table 2. Table 2 indicates that the level of significance for all variables is more than 5% (p-value > 0.05), and, as stated by Jarque et al. (1987), this suggests that all of the variables of the research are normally distributed.

Table 2. Jarque–Bera normality test				
Variable	**EPS (Xit)**	**Price (Pit-1)**	**Price (Pit)**	**Return (Rit)**
Jarque-Bera	1.6612	0.7154	1.4019	0.5873
P-value	0.6032	0.6048	0.5102	0.6521

4.2. Autocorrelation test

Since the Durbin-Watson (D-W) test will constantly have a value of between 0 and 4, there is no autocorrelation in the sample if the values are equal to 2.0, while positive autocorrelation occurs when the value is less than 2. In addition, negative autocorrelation occurs when the values are more than 2. The Durbin-Watson null hypothesis and the alternative hypothesis will be tested:

H_0: The model has no autocorrelation problem.

H_a: Autocorrelation exists in the model.

From Table 3, we find that the value of DW = 1.892, and by testing its significant values α = 0.05, the value of dL = 0.764, and the value of DV = 1.517, we note that the value of DW does not fall within the range, since dL<dV. Accordingly, the model does not suffer from the self-correlation problem.

4.3. Multicollinearity test

The generalized linear model (GLM) is dependent on the assumption of independence of each variable, and if this condition is not met, then the model suffers from a multicollinearity problem. To solve this problem, a parameter estimation process is undergone, whereby the Collinearity Diagnostics scale is used to calculate the variance inflation factor (VIF) among the study variables. Gujarati (2019) has shown that having a VIF value of higher than 10 indicates the existence of the problem of linear multiplicity of the independent variable. It is noted in Table 4 that the value of the variance inflation factor was greater than the number 1 and less than the number 10, and according to Gujarati (2019), this indicates that the study models are devoid of the problem of linear interference.

4.4. Descriptive statistics

After validating the data in the previous steps, the study models can now be tested. The degree of accounting conservatism for the profits of the Jordanian banks registered on the Amman Stock Exchange (ASE) is measured first. Table 5 shows the statistical results of the study; these results are also explained the accounting conservatism:

From Table 5, we notice that the arithmetic mean of the share of profit (EPS) is equal to 31.625, with a standard deviation of 41.921. The minimum value of the earnings per share is equal to 6.854 and the maximum value is 79.258. (Rit) is equal to 0.3154, with a standard deviation of 0.1297. The minimum value of the returns is equal to 0.0268 and the highest value is 0.2795.

Table 3. Testing for autocorrelation	
Durban Watson Statistic (DW)	**Variable**
1.892	Xit/Pit-1
dV = 1.517	dL = 0.764

Table 4. Multicollinearity Test	
Variables	**Variance Inflation Factor (VIF)**
DV	6.843
Return (Rit)	4.235
Rit*DVit	6.761

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Table 5. Descriptive Statistics		
Measurement	**Rit**	**EPS**
Means	0.3154	31.625
Maximum value	0.2795	79.258
Minimum value	0.0268	6.854
Standard Deviation	0.1297	41.921

4.5. Hypothesis testing and results

To test the hypothesis of the main study, it is necessary to study and analyze the extent of the different indicators of accounting conservatism among Jordanian banks registered on the Amman Stock Exchange over the period 2018 to 2021. It is necessary to test the extent of the difference between accounting conservatism in general during the period of the COVID-19 pandemic and in the period prior to it. One of the most widely used models for estimating accounting conservatism is the Basu model.

$$Xit \ /Pit - 1 = \alpha + \ a1 \ Rit + a2 \ DVit \ + \ a3(Rit \times DVit) \ + \ e$$

When testing the earlier equation on two sub-samples, between the period prior to the COVID-19 pandemic (2018–2019) and during the period of the pandemic (2020–2021), the increased reaction to terrible news, as opposed to good news, is estimated by regression coefficient a3 for the variable R × DV. In conservative reporting, the response parameter a3 to the variable R × DV is expected to be positive, while for the parameters ((a2 + a3)/a2), it is expected to be greater than the correct one, as the previous indicator measures the ratio of earnings sensitivity response to bad news compared to sensitivity to good news. If the index amount is greater than the correct one, this indicates that bad news is recognized more quickly than good news.

The first hypothesis states that "Jordanian commercial banks did not adopt the concept of accounting conservatism for accounting profits during the period prior to the COVID-19 pandemic (2018–2019)." Table 6 shows the statistical results for this period.

The regression equation is:

$$Xit \ /Pit - 1 = \ 0.3136 - 0.039 \ Rit - 1 - 0.413 \ DVit - 1 \ + \ 0.2641 \ (DVit - 1 \ \times \ Rit - 1) \ + \ e$$

It can be observed from the table above that the fixed term of the regression model is equal to 0.3136 and the response coefficient for the variable R × DV is positive (0.2641). This indicates the existence of a level of accounting conservatism in the financial reports for the period preceding the

Table 6. Statistical results for pre-Covid-19 pandemic (2018–2019)			
Variables	**Coef**	**Sig.**	**T**
a0	0.3136	0.643	0.24
R	−0.039	0.484	−0.58
DV	−0.413	0.567	−0.39
R× DV	0.2641	0.219	1.53
R2	6.63%		
R2- adjusted	3.91%		
(a 2 + a 3)/ a2	0.305		
ANOVA	Variance Source DF SS MS F P Regression 2 0.780 0.2195 1.59 0.188 Residual Error 42 6.907 0.1512 Total 44 7.396		

COVID-19 pandemic (2018–2019), and this result is supported by the value of the parameter ((α2 + α3)/α2), which is close to 0.305, indicating that the sensitivity of profits to bad news is about three times the sensitivity of profits to good news. From this, we can conclude that Jordanian banks practiced accounting conservatism for the period 2018–2019, but at a low level—because the value of the parameter ((α2 + α3)/α2) is less than one, so we reject the first hypothesis. In addition, in business studies, an R-squared value of over 70% would mostly be seen as indicating a high level of correlation, while an R-squared of lower than 40% would indicate a weak correlation. The table shows an R-squared value of 6.63%, indicating a weak correlation.

Our first result suggests that there was no level of accounting conservatism in financial reports during the year preceding the COVID-19 pandemic (2018–2019). Furthermore, this data casts doubt on the premise of conservatism because restricts earnings management options and strengthens the reliability of accounting performance indicators. In addition, it prevents banks from developing contracts that connect CEO remuneration more closely to accounting success. Alternatively, these findings may be interpreted as refuting the claim that remuneration committees compensate Jordanian bank managers for reporting cautious earnings in order to reduce the horizon problem. This observation is consistent with the findings of Qudah and Al-Kubaisi (2016); Al-Hroot et al. (2019), and Abdo et al. (2021). On the other hand, this observation is not consistent with the findings of Muttakin et al. (2019), El-Habashy (2019), and Al-Qudah et al. (2020).

The second hypothesis states that "Jordanian commercial banks did not adopt the concept of accounting conservatism for accounting profits during the period of the COVID-19 pandemic (2020–2021)." Table 7 shows the statistical results for this period.

The regression equation is

$$X_{it}\,/P_{it-1} = 0.471 - 0.061\,R_{it-1} + 0.911\,DV_{it-1} + 0.978\,DV_{it-1} \times R_{it-1}$$

It is evident from the above table that the response coefficients of the variables (DV, R × DV) and (Constant) have positive values, and that the response coefficient of the variable (R × DV) was positive and equal to (0.978) and has statistical values; this indicates a fundamental improvement in the level of accounting conservatism during the period of the COVID-19 pandemic (2020–2021). This result is supported by the value of (0.978), as this value for the parameter ((α2 + α3)/α2) is greater than one, which indicates that the sensitivity of profits to bad news is about twenty times the sensitivity of profits to good news, meaning that bad news is more swiftly recognized than good news, and thus the second main hypothesis is rejected.

Table 7. Statistical results for the period during the Covid-19 pandemic (2020–2021)			
Variables	**Coef**	**Sig.**	**T**
α0	0.471	0.749	0.17
R	−0.061	0.696	−0.43
DV	−0.911	0.689	−0.31
R× DV	0.978	0.028	1.98
R2	27.37%		
R2- adjusted	11.12%		
(α 2 + α 3)/ α2	0.305		

ANOVA	Variance Source	DF	SS	MS	F	P
	Regression	2	5.8994	0.3172	3.43	0.059
	Residual Error	38	15.9857	0.4719		
	Total	40	21.7741			

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The reason for the increase in conservative accounting practices during the period of the pandemic is that there has been a high level of uncertainty among Jordanian banks in recent decades, due to a high rate of inflation and political problems in surrounding countries such as Syria and Iraq. As a result, the Jordanian economy suffered, reflecting on the performance of Jordanian banks because of high unemployment, a budget deficit, national economic indicators, and a decrease in GDP. Accordingly, these banks have prepared their financial reports or statements conservatively. Moreover, the boards of directors were required to exercise their powers more extensively and make stringent choices based on the idea of accounting conservatism. This, in turn, will have a profound impact on Jordanian banks' accounting performance. This observation is consistent with the findings of Hejranijamil et al. (2020), Bahrini and Filfilan (2020), and Benkraiem et al. (2021). On the other hand, this observation is not consistent with the findings of Zhang et al. (2020), Cui et al. (2021), and Khalilov and Osma (2020).

The hypothesis of the third study states that "There are no statistically significant differences in the level of accounting conservatism for accounting profits in Jordanian commercial banks listed on the Amman Stock Exchange between the COVID-19 pandemic period (2020–2021) and the period prior to it." To test this hypothesis statistically, the basic Basu model will be applied first, and then the modified model will be applied by entering a dummy variable that represents the financial reporting standards. Table 8 shows the calculations of the essential differences for the parameter (a3) for the variable (R × DV) through the basic Basu model for the periods prior to and after the COVID-19 pandemic.

To examine the importance of the significant statistical differences between the regression coefficients for the period prior to the COVID-19 pandemic and those for the period of the pandemic itself, the F-test for the variable R * DV will be used, where we note that the value (F) of the variable R * DV is equal to (2.91). It is not an essential statistical value, because the (P-value) of this variable is equal to (0.067), and this indicates that there are no fundamental differences in the level of accounting conservatism during the study periods, after applying the basic Basu model. Table 9 shows the calculations of the significant differences in the parameter (a3) of the variable (R × DV × COVID) for the periods prior to and during the COVID-19 pandemic, using the modified Basu model.

We note from the previous table that the value of (F) for the variable (R * DV * COVID) is equal to (5.08) and it has an intrinsic statistical value, as the (P-value) for this variable is equal to (0.021),

Table 8. One-way ANOVA (R× DV)			
Description	**Between Groups**	**Within Groups**	**Total**
Df	3	100	103
Sum of Squares	0.01864	0.51321	0.53185
Mean of Squares	0.01864	0.00578	
F	2.91		
Sig.	0.067		

Table 9. One-way ANOVA (R× DV× COVID)			
Description	**Between Groups**	**Within Groups**	**Total**
df	2	82	84
Sum of Squares	1.968	39.127	41.095
Mean of Squares	1.968	0.513	
F	5.08		
Sig.	0.021		

indicating that accounting conservatism has increased during the period of the COVID-19 pandemic (2020–2021), which is confirmed in the modified Basu model by adding the variable (COVID) to all the chosen samples. Based on the results of the above investigation, the null hypothesis is rejected, meaning that there are statistically important differences in the accounting conservatism level for accounting profits in Jordanian banks between the period of the coronavirus pandemic (COVID-19) and the period prior to it.

Moreover, this result shows that as market risk and uncertainty grow, investors in deposit banking become more cautious, depend more on basic information, and see additional information as meticulous and speculative. As a result, during the COVID-19 epidemic, the quality of accounting information in accounting banks' records and audit reports became more complicated for investors and clients, and conditional accounting conservatism has not stepped in to fill this void. Furthermore, this result might not have created asymmetric information between bank managers, stockholders, and other parties involved, allowing them to make more unrealistic projections of future profitability before and after COVID-19. This result is consistent with the results of many previous studies, such as those of Benkraiem et al. (2021), Jin et al. (2020) and Khalil Abdo et al. (2021).

5. Conclusion

The global influence of the coronavirus on economics and community will have permanent consequences for human civilization. This has meant that sufficient, well-reasoned, and practical actions have had to be taken to ensure the stabilization and robustness of the economic activities of organizations. In this paper, we have investigated the effects of the coronavirus on the Jordanian banking sector and, in particular, on the enforcement of the conditional accounting conservatism principle. In this study, the Basu (1997) was modified by introducing one additional dummy to the original model—that of the COVID-19 variable—using the General Linear Model statistic. The sample of the study consists of 16 banks listed on the Amman Stock Exchange (ASE), with 64 observations being made over the period 2018-July 2021.

The findings of this study indicate that COVID-19 has had a significant positive effect on conditional conservatism in the Jordanian banking sector between the two periods in question. The study recommends that the authorities concerned should issue instructions for accountants that can be applied in practice to achieve the desired level of accounting conservatism, by international standards and local laws and legislations. Finally, the study recommends that the effect of coronavirus or any crisis raises the relevance and reliability of the reported accounting information, so that useful and relevant information may be provided to the users of financial reports.

Based on past results, the study recommends that there is a necessity for the authorities concerned with issuing accounting standards to pay attention to the concept of accounting conservatism in terms of significance and content, by issuing guidelines to accountants that can be practically applied to achieve the desired degree of conditional accounting conservatism, in line with international standards and local laws and legislations. Future research could also be conducted to investigate whether the impact of the coronavirus is the same for the banking sectors of other developing countries as it is for the Jordanian banking sector. By studying the impact of the coronavirus on conservatism in developing countries, the sample size can also be increased due to the availability of more financial data.

Subsequently, this study does not investigate long-term conditional conservatism as its first limitation. Furthermore, the sample size of this analysis is restricted to Jordanian banks because it is the only example identified that is compatible with the crisis time. Subsequently, this study is exploratory in nature and has no intention of establishing causal relationships between factors. For the purposes of this study or as it relates to information on accounting conservatism, the news recent earnings model (Basu, 1997) is used as a measure of conditional conservatism but has well-documented drawbacks (Li et al., 2017). While this study analyzes the impact of certain key bank-

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level factors on conditional conservatism, other variables such as CG values, are arguably excluded. All of these issues deserve further investigation.

To maintain Jordanian accounting standards, In addition, the paper suggests that more conservative accounting regulations should be enacted to maintain accounting standards and principles in Jordan, especially the principle of conditional accounting, and ensure that they are applied in practice in private, government companies, and not just enacted in theory without being activated in practice. Looking at the level of conditional conservatism in Jordan and other Middle Eastern countries will be an interesting future study. Moreover, the countries in the Middle East should be investigated to determine whether their results are similar to those of Jordan or are they different, and what are the similarities, differences, points of compatibility, and points of collision between them.

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