THE EFFECTS OF ACCOUNTING MEASUREMENT OF COVID-19 PANDEMIC ON THE BUSINESS INDUSTRIES: EMPIRICAL REVIEW

Siti Aisyah Omar (a) Farhana Hasbolah (b) Abul Bashar Bhuian (c) Md. Jafor Ali (d)
(a) Lecturer, Department of Accounting, Finance, and Muamalah, Faculty of Business and Accountancy, Universiti Selangor, Shah Alam, Malaysia; Email: aisyahomar@unisel.edu.my
(b) Lecturer, Department of Accounting, Finance, and Muamalah, Faculty of Business and Accountancy, Universiti Selangor, Shah Alam, Malaysia; Email: farhana.hasbolah@unisel.edu.my
(c) Associate Professor, Faculty of Business and Accountancy, Universiti Selangor, Shah Alam, Malaysia; Email: bashariuk@gmail.com
(d) Assistant Professor, Faculty of Business and Accountancy, Islamic University Kustia, Bangladesh; Email: jaforkb@gmail.com

ARTICLE INFO
Article History:
Received: 03 November 2022
Accepted: 27 December 2022
Online Publication: 30 December 2022

Keywords:
Covid-19, Pandemic; Accounting Measurement, Business Industries

JEL Classification Codes:
H83, O14

ABSTRACT
The Covid-19 global pandemic has affected most companies financially as it has led to massive uncertainties across all sectors and industries. In such situation it requires the refined, and highly integrated accounting information to measure and reflect the economic operation situation and provide early warning to decision makers. The study uses online empirical recourses by the name of Covid-19 pandemic impact on the industries and accounting measurement of the business industries in different online database sources such as Google Scholars, Springer Link, Wiley, Science Direct, ISTOR, Emerald full text, Scopus, and EBSCO HOST. The review findings show that there are different accounting measurement used to measure the impact of Covid-19 on various business industries. The findings of the study also identified that different industries react differently to Covid-19, thus the study findings could be used to draw policy guideline for the industries which were significantly affected by the epidemic.

INTRODUCTION
Covid-19 is a major health emergency worldwide. The outbreak of Covid-19 affected health care, economy, transportation, and other fields in different industries worldwide. People were asked to go out less, crowded places such as shopping malls were shut down, countries are forced to adopt quarantine measures due to the highly infectious nature of Covid-19 and all of these actions bring great negative impact to human life and business.

Covid-19 also affects corporate performance in a situation where they miss the profitable projects as investors tend to defer investment when uncertainties rise and bring higher risks (Zeng et al., 2016). This action will affect the companies’ sustainability as cash were kept instead of being invested, which may lead to a decline in corporate revenue, and ultimately a decline in corporate performance. Other than that, the companies’ productivity and revenue declined sharply due to the implementation of the quarantine measures, which inevitably led to performance decline. Globally, the Gross Domestic Product (GDP) is trending towards negative in 2020. The magnitude and speed of downturn in economic activity that has shadowed are unlike anything experienced ever before (Abiad et al., 2020; Hutt, 2020; Report, 2020). The world economy is navigating to embrace the worst economic recession since the great depression of the 1930s and far worse than the Global Financial Crisis in 2008 and 2009 (Gopinath, 2020; Report, 2020). The economic downturn steers in many ways involving 1

1Corresponding author: ORCID ID: 0000-0002-6417-9818
© 2022 by the authors. Licensee ACSE, USA. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

the pathway and severity of the pandemic, the intensity, and efficacy of containment efforts such as quarantine, isolation, lockdown, and social and physical distancing, supply chain disruptions, demand and expenditure pattern shifting, market strain, behavioral and confidence impacts, collapse in commodity prices and capital market turnaround. The global economic growth is going to shrink by -5.7% in 2020 (Abiad et al., 2020; Polizzi et al., 2020; Report, 2020).

The Covid-19 poses a risk of pervasive poverty, acute hunger or malnourishment, and social safety net especially on the poor and the most vulnerable across the globe due to negative supply and demand shock as income declines (Husain, 2020). On the other hand, the global production and consumption almost in a standstill for the extreme measures like full or partial lockdown, isolation and social distancing depicting highly uncertain scenarios of large scale economic downsize (Akira Toda, 2020). There are changes in consumer behavior patterns sharply, which may cause demand and spending lost permanently, thus affecting business in the long run (Maital & Barzani, 2020). The most affected industries such as tourism and hospitality, aviation, oil and gas, automotive, consumer products, consumer electrics, and semi-conductors, need to change as Covid-19 outbreak evolves (Surico & Galeotti, 2020). As the magnitude of the economic losses depend on how the outbreak evolves, its economic consequences are vastly ambiguous and hard to predict.

The review findings show that there are different accounting measurement used to measure the impact of Covid-19 on various business industries. The findings of the study also identified that different industries react differently to Covid-19, thus the study findings could be used to draw policy guideline for the industries which were significantly affected by the epidemic. Therefore, this study is aimed to review accounting measurement of Covid-19 pandemic impact on various business industries, so that policymakers can intuitively understand the impact of Covid-19 on various industries from different accounting measurement perspective, and how to promote the recovery of the industrial chain after the outbreak.

MATERIALS AND METHODS
The study uses online empirical recourses by the name of Covid-19 pandemic impact on the industries and accounting measurement of the business industries in different online database sources such as Google Scholars, Springer Link, Wiley, Science Direct, JSTOR, Emerald full text, Scopus, and EBSCO HOST. From this search, several journal articles, conference papers, and other types of work have been analyzed to determine which articles need to be included in the review of this paper. After reading thoroughly most relevant articles collected were found best fit within objectives of the present issues about accounting measurement on the Covid-19 impact. The review has been examined based on objectives, methods, and findings accordingly to all collected empirical studies.

RESULTS AND DISCUSSIONS
The Covid-19 global pandemic has affected most companies financially as it has led to massive uncertainties across all sectors and industries. This uncertainty affects liquidity of companies especially in managing tight cash flow and significant drop in sales create pressure on the companies, while at the same time they need to maintain the financial reporting requirement. This pressure may increase the temptation for the companies to conceal certain information using various accounting techniques, and potentially misleading their financial statement in order to meet stakeholder expectations especially in cases where substantial judgment and professional skepticism required (Levy, 2020).

The adoption of concealing practices is aimed to avoid from showing the volatile changes in companies’ financial performance, as well as to maintain stakeholders’ confidence especially in uncertain situation as the financial practices become more complex and more financial-related information need to be presented in financial reporting. In addition, companies tend to conceal their real performance to reflect stakeholders’ expectation on the financial performance during economic downturn or financial hardship. The pandemic could result prolonged financial liquidity and solvency problem, which will result negative impact on companies’ financial results. Thus, Covid-19 may also affect the styles of management accountability in financial reporting (Pavlatos & Kostakis, 2015). The grey lines in deciding between acceptable and unacceptable behavior in financial reporting include the using of fair value accounting, big bath earnings management, loss avoidance and income smoothing techniques to lessen the significant impact of Covid-19 towards business (Ozili, 2021). Thus, many guidelines were published by accounting bodies to discuss key accounting considerations related to conditions that may result from Covid19 pandemic especially on the areas involving estimates and going concern (KPMG, 2020; Deloitte, 2020; IAS Plus, 2020).

Earning management technique consists of income minimization, income maximization, income smoothing, and a big bath (Scott, 2012). Among method used by companies during pandemic is Big Bath accounting. This method charges a one-time large expense against income to result lower profit in the pandemic year with the expectation of higher profit in future years as the company may suffer dramatic losses in future due to Covid-19 pandemic (Fiechter & Meyer, 2010; Hope & Wang, 2018). Furthermore, stimulus packages or grants received from government may be reported in the following years to show better financial performance (Ozili & Arun, 2020). Barman (2020) and Cheng et al. (2019) suggest that companies have tendency towards big bath reporting behavior in financial hardship and unstable situation such as pandemic and natural disasters regardless of whether they receive any financial assistance or not. A few studies have been conducted to assess the use of other accounting practices such as Big Bath during pandemic or financial crisis (El-Mousawi & Kanso, 2020; Levy, 2020; Ozili, 2021).

He et al. (2020) used big data portrait analysis based on the financial data of listed companies in China to measure the impact of Covid-19 on various Chinese industries. Using the synthetic index compilation method to compile an accounting index that captures the period before and after Covid-19 outbreak, the study found that basic industry was less affected by the epidemic, while the rest of the industries were significantly affected. The aviation, tourism and other service industries have been greatly impacted while new infrastructure, Chinese patent medicine and Internet industries have achieved great development. The study also found that manufacturing, and sports and entertainment industries received
development opportunities during the pandemic, while the hotels and catering, and residential service industries suffered heavy losses. Whilst, the first study that examine the relationship between companies' financial reporting characteristics and stock return performance during Covid-19 outbreak found that companies with more conditionally conservative accounting practices have higher stock returns than other firms during the Covid-19 outbreak (Cui et al., 2021). The study also examined whether the relationship between conditional conservatism and stock returns during Covid-19 varies with information asymmetry, using sample of listed companies in China. Investors become more risk-averse and rely more on fundamental information during market downturns, as they consider other information noisy and speculative due to higher risk and uncertainty in the market (Lang & Maffett, 2011). Thus, the quality of accounting information and related disclosures in the financial statements is more important for capital markets and investors during Covid-19 pandemic period.

There is also a number of study examining the impact of Covid-19 crisis on stock markets which focus mainly on the role of financial flexibility such as cash, leverage and external financing (Acharya & Steffen, 2020; Ding et al., 2020; Fahlenbrach et al., 2020; Ramelli & Wagner, 2020), corporate social responsibility (CSR) activities (Albuquerque et al., 2020; Ding et al., 2020), industry characteristics (Pagano et al., 2020) and analyst forecasts (Landier & Thesmar, 2020).

Aldamen et al. (2020) investigated the impact of corporate governance on accounting and market performance relationships of family firms during the Global Financial Crisis (GFC). The study found that good corporate governance whether it is a family firm or non-family firm is associated with better accounting and market performance during uncertainty times.

Xiao & Xi (2021) examined the relationship between Covid-19 outbreak and the Chinese listed firms’ earnings management practices, moderated by the corporate social responsibility (CSR) and the external corporate governance mechanism. The data from financial reports during the pandemic in 2020 was used in the study. The result indicated an increase in accrual-based earnings management (AEM) and a significant decline in real activity-based earnings management (REM) at companies in the most severely affected regions. In these regions, both AEM and REM were less pronounced for the companies with a higher CSR performance than those with a lower CSR performance.

**CONCLUSIONS**

The review findings show that different accounting measurement can be used to measure the impact of Covid-19 as each method involves different financial view and business perspective. Therefore, this study is aimed to review accounting measurement of Covid-19 pandemic impact on various business industries, so that policymakers can intuitively understand the impact of Covid-19 on various industries from different accounting measurement perspective, and how to promote the recovery of the industrial chain after the outbreak. The review findings show that there are different accounting measurement used to measure the impact of Covid-19 on various business industries. The findings of the study also identified that different industries react differently to Covid-19, thus the study findings could be used to draw policy guideline for the industries which were significantly affected by the epidemic. For recommendation, in order to prevent illegitimate accounting method, government intervention in providing financial assistance and loosening the accounting and reporting guidelines to offer flexibility in reporting might help companies to declare their actual performances. However, the relaxing of the accounting guidelines must be assessed thoroughly and carefully to prevent the manipulation by understating risks and transparency in reporting the financial results during and after the pandemic year In such situation it requires the refined, and highly integrated accounting information to measure and reflect the economic operation situation and provide early warning to decision makers. In a conclusion, this study will expose various counting measurement related to Covid-19 impact on different business industries. The impact of Covid-19 on business worldly is inevitable, and for all industries, it is crucial to accept the new way of doing business and dynamic business environment in order to survive and sustain. Since different industries react differently to Covid-19, hence this study is seen to provide information in drawing policy guideline for the industries which were significantly affected by the epidemic.


**Institutional Review Board Statement:** Ethical review and approval were waived for this study, due to the fact that the research does not deal with vulnerable groups or sensitive issues.

**Funding:** The authors received no direct funding for this research.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

**Conflicts of Interest:** The authors declare no conflict of interest.

**REFERENCES**


**Publisher’s Note:** ACSE stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2022 by the authors. Licensee ACSE, USA. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

*American International Journal of Economics and Finance Research (P-ISSN 2642-2867 E-ISSN 2642-2875) by ACSE is licensed under a Creative Commons Attribution 4.0 International License.*