

COVID-19's Effects on Inward Foreign Direct Investment and Earnings Management in Southern Africa's Development Community

**Mariam Hamadi Hussein¹, Janeth Patrick Swai²,
Abraham Charles Nathanael³**

^{1,2}Mzumbe University, Tanzania

³Tanzania Institute of Accountancy, Tanzania

Correspondence: mamumery171@gmail.com

Abstract

This study evaluates the impact of COVID-19 on both inward Foreign Direct Investment (FDI) and accrual-based earnings management (AEM) in 16 Southern African Development Community (SADC) countries, with a particular focus on Kenya and Tanzania. Principally, it analyzes FDI inflows before and during the pandemic, highlighting disparities and exploring how they exert financial pressure on firms, influencing their earnings management behaviors. Additionally, the study evaluates how COVID-19-induced economic adversities and host countries' financial interventions, particularly public debt management, moderated the relationship between pandemic-related challenges and FDI inflows. The study relied on secondary data as its primary data collection technique, employing a longitudinal design; the study covered a three-year pandemic period from Q1 2020 to Q4 2022, against a pre-pandemic benchmark from 2017 to 2019. Findings revealed a statistically significant difference in average FDI inflows between these two periods. COVID-19 pandemic also revealed a statistically significant decline of FDI inflows with public debt management effectively mitigating uncertainties and thereby stabilizing FDI. Concurrently, the study revealed a weak link between COVID-19 and AEM and the absence of a relationship between FDI and AEM during the pandemic among non-financial firms in Kenya and Tanzania, likely because the pandemic disrupted normal economic patterns, weakening traditional relationships such as the sensitivity of financial reporting quality to macroeconomic influences.

Keywords: COVID-19; Earnings Management, Foreign direct Investment

Introduction

The COVID-19 pandemic has profoundly affected the global economy, resulting in significant disruptions across various sectors. Identified in late 2019 in Wuhan, China, the pandemic caused by the novel coronavirus SARS-CoV-2 has led to widespread illness, death, and substantial alterations in everyday life (Xu et al., 2020; Patel et al., 2020). Global GDP contracted sharply as governments worldwide implemented restrictive measures such as lockdowns, travel restrictions, and social distancing to combat the spread of the virus (Chiesa et al., 2021). While these measures effectively curtailed transmission, they also triggered severe economic consequences, with many businesses across the globe facing disruptions in the flow of goods and services (Yu et al., 2021). Unemployment surged, with millions losing jobs, particularly in sectors like hospitality, travel, and retail (Sun et al., 2024; Srinivas et al., 2024).

The effects of COVID-19 pandemic have engendered a need for comprehensive analysis within specific regions, particularly the development economies. Developing economies experienced significant economic disruptions during the pandemic due to their reliance on global trade and weaker governance structures. One key aspect of global trade affected during COVID-19 is Foreign Direct Investment (FDI). FDI refers to the establishment of business operations or acquisition of stakes in existing companies by foreign entities, has traditionally been a crucial driver of economic growth, technology transfer, and job creation in most developing countries, including Africa (Martínez-Galán & Fontoura, 2019).

Southern African Development Community (SADC) region historically attracted substantial FDI inflows due to diversified natural resources endowment. However, the pandemic caused global economic uncertainty, limiting cross-border investments, and firms reduced expansion plans as investors became risk-averse (UNCTAD, 2021). Thus compel the analysis the multifaceted impact the pandemic on FDI in SADC nations, considering that economic performance varies significantly across this diverse region (Muzuva, 2023).

Compounding these economic challenges, the COVID-19 pandemic and its effect on FDI has raised additional concern to researchers

regarding earnings management practices among firms facing pressure to maintain financial performance to attract FDI amidst the pandemic. Earnings management (EM) encompasses the use of accounting techniques to influence reported financial results, often to present a more favorable view of a company's economic health (Zulkarnaeni et al., 2024). In times of economic turmoil, managers may resort to accrual-based earnings management (AEM), where they adjust accounting estimates or policies, or engage in real earnings management (REM), which manipulates actual business activities to project a more stable financial situation (Swai & Derefa, 2024).

The social distancing protocols and disrupted audit activities during the pandemic made it particularly convenient for firms to engage in AEM, as oversight was significantly diminished during lockdowns (Albitar et al., 2020). Therefore, this study explores the relationship between COVID-19, FDI, and Earnings Management. This inquiry addresses critical questions: 1) were there significant differences in FDI inflow among countries in the SADC region before and during the pandemic period? 2) How do the effects of the COVID-19 pandemic on foreign direct investment (FDI) influence firms' earnings management practices? Furthermore, this study will explore the role of Governments stimulus and financial relief programs employed to navigate these unprecedented challenges.

As SADC countries continue to navigate the broader economic fallout from the pandemic, analyzing these factors will provide valuable insights into the region's economic dynamics. This research not only contributes to the understanding of how developing countries with diverse economic environments, political stability, and institutional maturity respond to COVID-19's impact on FDI, but also sheds light on how firms adapt their earnings management practices in times of crisis. Thus, contributes to the broader understanding of the role that foreign investment plays in fostering financial transparency during periods of economic uncertainty.

Literature Review

Theoretical Review

The section reviews three theories relevant to understanding the impact of the COVID-19 pandemic on foreign direct investment (FDI). The Pandemic Management Theory (PMT) posits that the management of pandemics requires an integrated approach that considers economic, social, and health-related factors (Stueck, 2021). PMT highlights the importance of a coordinated and adaptive response to pandemics, revealing that countries with strong institutions and healthcare systems experienced increased FDI inflows during the pandemic, while those with weaker infrastructures saw a decline (Stueck, 2021).

Institutional Theory (IT) also suggests that external shocks (like COVID-19) can disrupt institutional stability, affecting investor confidence and financial practices (Seal 2006). Thus, hypothesizing that, the pandemic might weaken the regulatory environments and market stability, influencing FDI decisions and firms' earnings management behaviors.

Signaling Theory (ST) suggests that firms send signals to the market to influence investor perceptions (Spence 1978). Therefore, in response to declining FDI, firms might engage in earnings management to signal financial stability to maintain investor confidence or meet financial covenants. Collectively, these theories provide a framework for analyzing the pandemic-induced disparities in FDI before and during the pandemic and how firms adjust their financial reporting practices to reassure foreign investors and stakeholders about their financial health.

Empirical Reviews

Various studies highlight the significant impacts of global crises, particularly the 2008 financial crisis and the COVID-19 pandemic, on Foreign Direct Investment (FDI) across different regions and sectors. Magoulios et al. (2021) observed declines in GDP, trade, and FDI in Greece and the Balkans during the 2008 crisis, although subsequent recovery aligned with EU economic improvements. Hysa (2022) noted a redirection of FDI flows toward Central and Eastern Europe, while Saleh (2023) pointed out the negative impact on FDI inflows to emerging

markets. The pandemic exacerbated these trends, with Moosa and Merza (2022) reporting a 36% global FDI decline during COVID-19, although recovery began in 2021. The regional impacts varied significantly; for instance, Veljanoska and Mazahrih (2023) documented significant negative effects in Europe and low-income countries, while some Asian economies experienced positive outcomes. Sectors like manufacturing faced substantial declines, and the services sector also saw reduced Greenfield investments. Furthermore, FDI fluctuations were observed in countries like Nepal and Botswana, with Sub-Saharan Africa exhibiting limited effects on economic growth derived from FDI (Shittu et al., 2023). Collectively, these findings underscore the complex and varied responses of FDI to global crises, influenced by country-specific factors, sectoral dynamics, and government policy responses, reflecting a broader theme of managerial behavior in response to economic uncertainty.

Additionally, research results from across the globe indicate that managers often manipulate earnings, either upwards or downwards, during global crises such as the COVID-19 pandemic. For example, Lassoued and Khanchel (2021) analyzed a comprehensive sample of 2,031 European firms and found that European companies were more inclined to engage in earnings management (EM) practices during the pandemic compared to prior periods. Similar trends were observed by da Silva Flores, Sampaio-Oliveira et al. (2023) among Brazilian firms, which exhibited significant fluctuations in discretionary accruals, reflecting a heightened motivation for earnings manipulation. Filipović et al., (2022) noted that Croatian firms resorted to EM to boost income amid economic challenges, while Xiao and Xi (2021) discovered that Chinese firms in the most affected regions favored accrual-based EM over real EM. Studies by Liu and Sun (2022) in the USA and Hariadi and Kristanto (2022) in Indonesia also indicated an increase in EM practices during the COVID-19 outbreak. These findings align with earlier literature suggesting that managers intensify EM practices during crises to mitigate adverse impacts on performance, such as operating losses and stock price declines (Ozili & Arun, 2023). Conversely, a contrasting perspective suggests that EM practices may decrease during crises due to heightened investor scrutiny demanding quality earnings, as supported by findings from Ali et al.

(2022) and Pjaaka and Brannan (2022). Given the conflicting evidence on EM practices during the pandemic in emerging economies like Tanzania and Kenya, this study aims to address these gaps.

Research Methods

The longitudinal research design was used. The study focused on 16 SADC countries where quarterly information of 6 years (2017-2022) was used. The pandemic period covered three years, from the first quarter of 2020 to the last quarter of 2022. The study utilized secondary data as the primary technique for data collection, covering all 16 nations within the SADC. Inclusion of all these nations in the sample facilitated an extensive examination of the regions varied economic and governance frameworks. The pre-pandemic period was three years, from 2017 to 2019, allowing a holistic perspective on the impact of the COVID-19 pandemic across the 16 countries in the SADC. The three years preceding the pandemic (2017-2019) give us a framework for understanding standard conditions, and the following three years during the pandemic (2020-2022) facilitate the study of the changes and trends that resulted from its impact.

The study applied descriptive statistics to describe distribution of variables, and a paired t-test to compare the mean of a continuous outcome variable between two groups, where one group is measured at two different times or under two different conditions. Also, the study employed panel data analysis to measure changes over time. The integration of these methods permits a comprehensive assessment of the pandemic's repercussions on the chosen countries, yielding insights into both immediate and enduring effects.

The research adopted the following models to examine the relationship COVID-19, FDI inflow and AEM as follows: We first model how COVID-19 affects FDI inflows. Additionally, we evaluate how COVID-19-induced economic adversities and host countries' financial interventions, particularly public debt management, moderated the relationship between pandemic-related challenges and FDI inflows.

$$FDI\ Inflows_{c,q} = \alpha c + \beta_1(WPUI_{c,q}) + \beta_2 (WPUI_{c,q} \times CoFI) + \beta_3 (CoFI) + \sum_{k=0}^k \beta_k X_c^k + \epsilon_{c,q} \quad (\text{Equation 1})$$

Where;

1. $FDI\ Inflows_{c,q}$ = is the dependent variable; c = Country; q = Time in terms of quarters;
2. αc = A constant term;
3. β = Coefficient of independent/moderating variables;
4. $WPUI_{c,q}$ = This index measures uncertainty related to pandemics across the globe;
5. $WPUI_{c,q} \times CoFI$ = The first interaction term which means the effects of WPUI on FDI inflows is contingent upon CoFI;
6. X_c^k = A set of country level control variables that include Governance, Trade Openness, inflation rate, exchange rate, and GDP per Capita;
7. $\epsilon_{c,d}$ = Error term.

We then examine how FDI influences firms' accrual-based earnings management (AEM) during the COVID-19 pandemic:

$$AEM_{it} = \alpha_c + \beta_1(FDI_{it}) + \beta_2(COVID_{it}) + \beta_3(X_{it}) + Z_{it} + \epsilon_{it} \quad (\text{Equation 2})$$

Where:

1. AEM_{iq} = Accrual-based earnings management for firm (i) at time (t) (measured using discretionary accrual models, e.g., Modified Jones Model)
2. $COVID$ = Dummy variable that measures the pandemic period (1) and pre pandemic (0)
3. X_{iq} = Firm-specific control variables (e.g., firm size, profitability, firm age)
4. Z_{iq} = Firm-specific unobserved effects
5. ϵ_{iq} = Error term

Result and Discussion

The research applied standard deviations, means, minimum and maximum values of the variables. Results are presented in Table 1.

Table 1: Descriptive Statistics

Variable		Mean	Std. Dev	Min	Max
FDI	FDI before COVID-19	4.531256	6.045852	-10.03838	21.78419
	FDI during COVID-19	3.776047	8.371543	-8.84826	38.3345
WPUI		7.923111	6.785744	0.706546	17.2288
Trade Openness		65.43965	28.14471	17.3242	125.413
Exchange Rate		697.2384	1165.531	11.0873	4429.58
GDPPC		3679.811	4258.323	456.582	17879.2
Inflation		21.46355	71.1921	1.89036	557.202
Governance		-0.3932756	0.7767514	-1.59227	1.69815

Source: Data (2017-2022)

Table 1 presents descriptive statistics for various economic variables, comparing FDI before and during the COVID-19 pandemic. The data reveals that the average FDI was higher before the pandemic than during it, indicating a decline in investment trends. Trade openness shows a relatively higher average, suggesting significant integration into global markets, while the exchange rate displays considerable variability, indicating unstable currency fluctuations. GDP per capita presents a significant range, reflecting disparities in income levels, and inflation rates also highlight volatility, with a wide span between the minimum and maximum values. Governance, indicated by negative average values, suggests challenges in political stability and regulatory effectiveness, which may impact economic performance.

Disparities between FDI Inflows in the Pre and During the Pandemic

The study used a before-after test (also known as a paired t-test) to compare the mean of a continuous outcome variable between two groups, where one group is measured at two different times or under two different conditions. The study compared FDI inflows from 3 years before the pandemic and 3 years during the pandemic to see if the means were significantly different. The results are indicated in Table 2.

Table 2: Paired Samples T-Test Results

Variable	Mean	Std. Err	Std. Dev	(95% Conf. Interval)
----------	------	----------	----------	----------------------

Pre-pandemic	4.531256	0.945804	6.045852	11.1183	15.2817
During Pandemic	3.776047	0.78817	8.371543	9.26525	12.73475
Diff	0.755209	0.157634	-2.32569	1.85305	2.54695
Pr (T < t) =	0.0232				

Source: Data (2017-2022)

The difference between the average FDI inflows in the two periods is statistically significant, with a p-value of 0.0232, indicating that there is less probability that the observed disparity is due to chance. This suggests that the pandemic has had a significant impact on FDI inflows. The results suggest that the pandemic has led to a decline in FDI inflows, with an average decline of around \$0.75 billion compared to the pre-pandemic period. The higher standard deviation and standard error during the pandemic period indicate that FDI inflows were more volatile and uncertain during this time, likely due to the unpredictable nature of the pandemic and its effects on global economies.

The findings align with previous research, such as by Mohapatra and Gopalaswamy (2016), which indicated that financial crises adversely affect FDI inflows more than outflows, suggesting that emerging economies may need protective mechanisms during such events. Additional studies indicate that crises induce heightened uncertainty, leading to decreased FDI as investors grapple with risk aversion, as noted by Saleh (2023). These results further align with current phenomena, such as geopolitical tensions and supply chain disruptions, which continue to affect global FDI dynamics, complicating recovery strategies. Abdulazeez & Alyousfi (2025) also identified a notable negative correlation between COVID-19 and FDI movements. Their findings illustrate how increased infection rates drastically curtailed FDI activities, indicating the pandemic's destabilizing influence on regional investments. Additionally, Archana et al., (2023) affirm this trend, noting a significant reduction in FDI inflows amid the pandemic.

The findings resonate with the Pandemic Management Theory, suggesting that investor behavior shifts towards risk aversion during health crises, underscoring the necessity for effective management

strategies to attract investment. Overall, the research highlights the crucial link between global health crises and FDI patterns, emphasizing the need for policymakers to address these dynamics to foster economic growth amidst uncertainty.

Effect of Covid-19 pandemic on FDI inflows

The Hausman test preferred the random effect model to be used to the estimate values of the variables and show the effect of Covid-19 economic adversity on FDI inflows. Results are indicated in Table 3.

Table 3: Random Effect Regression Estimation Results

FDI	Coef.	Std. Err	z	P> z	(95% Conf. Interval)	
WPUI	-0.23163	0.03987	-5.81	0.000	-0.3098	-0.15347
Trade Openness	0.07457	0.02949	2.53	0.011	0.016753	0.13238
Exchange Rate	-0.00079	0.00063	-1.26	0.206	-0.00203	0.00043
GDPPC	0.00028	0.00038	0.75	0.045	-0.00047	0.00104
Inflation	0.00427	0.00482	0.89	0.375	-0.00517	0.01372
Governanc e	-1.3604	1.95951	-0.69	0.018	-5.201	2.4801
_cons	-0.40367	3.81067	-0.11	0.916	-7.87247	7.06511
R-squared	0.6026					

Source: Data (2017-2022)

The results in Table 3 reveal that WPUI has a statistically significant and negative impact on FDI inflows. This result means that an increase in the WPUI is associated with a significant decrease in FDI. Also, results shows that trade openness and GDPPC have a positive and significant control impact on FDI, indicating that increased trade openness, and GDPPC are associated with increased FDI. The coefficients for exchange rate and inflation are not statistically significant, suggesting that these variables have no significant control impact on FDI. Also, governance quality is statistically and negatively significant; indicating that improved governance quality is associated with a decrease in FDI. Consistent with Ho and Gan (2021), the heightened uncertainty during health crises has a substantial, deterrent effect on FDI, particularly in the Asia-Pacific region and emerging economies. Veljanoska and Mazahrh

(2023) further nuance this by revealing varied impacts based on regional economic resilience, reporting negative effects in Europe and low-income countries, while some Asian nations experienced positive influences due to their evolving economies and effective policy responses. Koçak and Barış-Tüzemen (2022) note that countries with weaker economic foundations faced stronger negative impacts, whereas those with robust economies-maintained desirability for investors. Contrarily, findings by Veljanoska et al., (2022) indicate a positive yet insignificant influence of the pandemic on FDI inflows in Turkey. Supporting evidence from Camino-Mogro and Armijos (2020) highlights an overall decline in FDI, particularly influenced by lockdown measures.

Moderating Effects of Financial Interventions

Moderating Effects of Public Debt Management (PDM)

The study applied a random effected model to determine the modifying effects of PDM between WPU and FDI. Results are indicated in Table 4.

Table 4: Results for Moderating Effects Of PDM

FDI	Coef.	Std. Err	z	P> z	(95% Conf. Interval)	
WPUI	-0.34533	0.04707	-7.34	0.000	-0.4376	-0.25306
PDM	0.86438	0.74092	-1.17	0.013	-2.31657	0.58779
WPUI*PDM	0.22714	0.06773	3.35	0.001	0.094379	0.35990
Trade Openness	0.08278	0.02663	3.11	0.002	0.030591	0.13498
Exchange Rate	-0.00073	0.00056	-1.3	0.194	-0.00185	0.00037
GDPPC	0.00038	0.00035	1.07	0.285	-0.00032	0.00108
Inflation	0.00878	0.00444	1.98	0.048	7.44E-05	0.01750
Governance	-2.08908	1.791895	-1.17	0.244	-5.60113	1.42296
_cons	-1.374779	3.60319	-0.38	0.703	-8.4369	5.68734
R-squared	0.7029					

Source: Data (2017-2022)

Results in Table 4 show that the interaction term between WPUI and PDM is statistically significant ($P>|z| = 0.001$), with a coefficient of 0.2271407. This suggests that the relationship between WPUI and FDI is moderated by PDM. This means that the effect of WPUI on FDI is not constant, but rather it varies depending on the level of PDM. In other words, the impact of pandemic uncertainty on FDI is influenced by how

well a country's public debt is managed. A country with poor PDM is more susceptible to the negative effects of pandemic uncertainty on FDI, as investors may be more hesitant to invest in such a country due to concerns about the government's ability to manage its debt. On the other hand, a country with well-managed public debt may be less affected by pandemic uncertainty, as investors may view it as a more stable and attractive investment destination. This aligns with findings from Kammoun & Ben (2022), Vennila (2021), Singh (2023), and Tsinaridze et al., (2021), who collectively highlight the adverse effect of the pandemic on FDI and the importance of effective government responses, particularly through public debt management, as essential for economic recovery.

Moderating Effects of Financial Market (FM)

The study applied a random effected model to determine the modifying effects of Financial Market (FM) between WPU and FDI. Results are indicated in table 5.

Table 5: Results for Moderating Effects of Financial Market

FDI	Coef.	Std. Err	z	P> z	(95% Conf. Interval)	
WPUI	-0.18727	0.05210	-3.59	0.000	-0.2893	-0.08516
FM	0.47952	0.82396	0.58	0.561	-1.1354	2.09446
WPUI*FM	0.09826	0.07986	-1.23	0.219	-0.2547	0.05826
Trade	0.06975	0.02965	2.35	0.019	0.0116	0.12788
Openness						
Exchange	-0.00079	0.00064	-1.23	0.218	-0.0020	0.000472
Rate						
GDPPC	0.00037	0.000394	0.95	0.342	-0.0004	0.001148
Inflation	0.00342	0.004831	0.71	0.478	-0.0060	0.012896
Governance	-1.64383	1.989074	-0.83	0.409	-5.5423	2.25468
_cons	-0.70500	3.872126	-0.18	0.856	-8.2942	6.884227
R-Squared	0.6192					

Source: Data (2017-2022)

Results in Table 5 show that the coefficient of WPUI*FM is 0.0982635, which suggests that the moderating effect of FM on the relationship between WPU and FDI is positive. However, the standard error is relatively large (0.0798619), and the z-statistic is only -1.23,

which is not statistically significant at conventional levels (p-value = 0.219). This means that the moderating effect of FM on the relationship between WPU and FDI is not statistically significant, indicating that there is no strong evidence to support the idea that FM plays a significant role in mitigating or exacerbating the impact of WPU on FDI.

Table 6: Fixed Effects Regression – Kenya and Tanzania

AEM	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]		Sig
COVID-19	.502	1.25	0.40	.688	-1.962	2.966	
FDI	0	0	0.30	.762	0	0	
SIZE	13.295	.778	17.08	0	11.76	14.83	***
RAO	6.774	6.63	1.02	.308	-6.3	19.847	
LEV	16.316	4.235	3.85	0	7.964	24.667	***
AGE	-.234	.43	-0.54	.588	-1.082	.614	
Constant	-233.733	31.121	-7.51	0	-295.1	-172.367	***
R-squared		0.610	Number of obs			250	
F-test		52.481	Prob > F			0.000	

*** $p < .01$, ** $p < .05$, * $p < .1$

Results in Table 6 show that, the relationship between the COVID-19 Pandemic and AEM is positive but insignificant. Suggesting that the pandemic had no statistically significant impact on firm's AEM behavior for both Kenyan and Tanzanian listed non-financial firms. The results aligns with previous studies (Filipović, Bartulović et al. 2022, Patrick and Derefa 2024), that supports the idea that, during crises, market mechanisms may tolerate poor firm performance, reducing incentives for managers to engage in earnings manipulation. A zero coefficient on FDI suggests that, after controlling for other firm-level variables such as firm age, size, profitability, and leverage, foreign direct investment (FDI) inflows had no statistically significant effect on accrual-based earnings management (AEM) during the COVID-19 pandemic. These findings support the notion that the pandemic disrupted normal economic patterns, weakening traditional relationships-such as the sensitivity of financial reporting quality to macroeconomic factors. This aligns with the findings of Nham and Hieu, and Zhang, Hu et al. (2020), who also observed that FDI was less effective in predicting earnings management during periods of extreme uncertainty, such as the COVID-19 crisis.

Conclusion

The study concludes that there were significant disparities in FDI inflows before and during the COVID-19 pandemic. Suggesting that, investors have become increasingly cautious and risk-averse in the face of the pandemic, leading to a decline in FDI inflows. But the public debt management was found to effectively mitigating uncertainties and thereby stabilizing FDI. Moreover, the study revealed a weak link between COVID-19 and AEM and the absence of a relationship between FDI and AEM during the pandemic among non-financial firms in Kenya and Tanzania, likely due to limited trading activity and disruption of normal economic patterns during the pandemic that weakens the traditional relationships—such as the sensitivity of financial reporting quality to macroeconomic factors.

Our findings emphasize the need for SADC countries to diversify their economies and reduce reliance on foreign investment, especially during economic shocks. Policymakers should focus on developing effective crisis-responsive financial monitoring frameworks to promote transparency and good governance beyond attracting FDI, focusing also on domestic institutional environment that uphold earnings quality during shocks. Investors must account for potential crises in their strategies and enhance economic resilience to withstand future shocks.

Future researchers should explore the long-term effects of pandemic-related policies on corporate financial practices and investment decisions. Expanding the research to include comparative studies with other regions experiencing similar challenges could enrich the understanding of adaptive strategies in developing markets.

Bibliography

- Abdulazeez Y.H & Saif-Alyousfi (2025) The impact of COVID-19 on foreign direct investment in Arab economies. *Journal of Islamic Accounting and Business Research*, 16(3).
- Albitar, K., Gerged, A. M., Kikhia, H., & Hussainey, K. (2020). Auditing in times of social distancing: the effect of COVID-19 on auditing quality. *International Journal of Accounting & Information Management*, 29(1), 169–178.
- Ali, H., Amin, H. M. G., Mostafa, D., & Mohamed, E. K. A. (2022). Earnings

- management and investor protection during the COVID-19 pandemic: evidence from G-12 countries. *Managerial Auditing Journal*, 37(7), 775–797.
- Aljawaheri , W. Ojah , H. Machi , A.–Almagtome, A. (2021): Covid-19 lockdown, earnings manipulation and stock market sensitivity: an empirical study in Iraq. *Journal of Asian Finance, Economics and Business* 8 (5): 707–715.
- Anthony J. Makin & Allan Layton (2020). The global fiscal response to COVID-19: Risks and repercussions. *Economic Analysis and Policy*, 69, 340–349
- Bugshan, A., Alnahdi, S., Ananzeh, H., & Alnori, F. (2022). Does oil price uncertainty affect earnings management? Evidence from GCC markets. *International Journal of Energy Sector Management*, 16(6), 1240–1258.
- Chen, C.-S., Chen, I.-S., Yang, T.-C., & Huang, C.-Y. (2023). Exploring the departure of audit-partners from Big4 to small-sized audit firm: Perception from stock market investors. *Modern Economy*, 14(11), 1485–1503.
- Chiesa, V., Antony, G., Wismar, M., & Rechel, B. (2021). COVID-19 pandemic: health impact of staying at home, social distancing and 'lockdown' measures a systematic review of systematic reviews. *Journal of Public Health*, 43(3), e462–e481.
- Eglantina Hysa, Erinda Imeraj, Nerajda Feruni, Mirela Panait and Valentina Vasile (2022). COVID-19—A Black Swan for Foreign Direct Investment: Evidence from European Countries. *Journal of Risk and Financial Management*. 15(4), 156.
- Elena Stavrova, Mariya Paskaleva, Ani Stoykova (2020). Black Swan Event: an evidence from china's economics effects. CBU international conference on innovations in science and education.
- Emad Alchikh Saleh (2023): The effects of economic and financial crises on FDI: A literature review: *Journal of Business Research*, 161: 113830-113830.
- Ezra, P. M., Kitheka, B. M., Sabuhoro, E., Riungu, G. K., Sirima, A., & Amani, A. K. (2021). Responses and impacts of COVID-19 on East Africa's tourism industry. *African Journal of Hospitality, Tourism and Leisure*, 10(6), 1711–1727.
- Febian Dwi Efendi, Diyah Probowulan & Achmad Syahfrudin Zulkarnnaeni (2024). Earnings Management Trend in Manufacturing Companies Sub-Sector Food and Beverage Listed on the Indonesia Stock Exchange Year 2019-2023: *West Science*

- Journal Economic and Entrepreneurship* 2(03):395-403.
- Ferry Syarifuddin & Maman Setiawan (2022). The Relationship between COVID-19 Pandemic, Foreign Direct Investment, and Gross Domestic Product in Indonesia. *Sustainability*, 14, 2786.
- Filipović, I., et al. (2022). "Earnings management and dividend payments during the Covid-19 pandemic." *Interdisciplinary Description of Complex Systems: INDECS* 20(5): 590-605
- Florida Veljanoska & Basman Mazahrih (2023). The impact of COVID-19 on FDI. *International Journal of Business Performance Management*, 24. 3-4.
- Florida Veljanoska & Roudaina Houjeir & Sokol Pacukaj, 2022. "The Impact of Pandemic on GDP Growth Rate, FDI and Export: A Case Study of Turkey," *Academic Journal of Interdisciplinary Studies*, Richtmann Publishing Ltd.
- Haneberg, D. H. (2021). How combinations of network participation, firm age and firm size explain SMEs' responses to COVID-19. *Small Enterprise Research*, 28(3), 229–246.
- Hariadi, K., & Kristanto, A. (2022). The Impact of COVID-19 Pandemic and Earnings Management: Does the History of Managerial Ability Have a Role? *Jurnal AKSI (Akuntansi Dan Sistem Informasi)*, 7(2).
- Ho, Linh Tu, and Christopher Gan. 2021. Foreign Direct Investment and World Pandemic Uncertainty Index: Do Health Pandemics Matter? *Journal of Risk and Financial Management*, 14: 107.
- Ivica Filipović, Marijana Bartulović & Toni Šušak (2022). Earnings Management and Dividend Payments during the Covid-19 Pandemic. *Interdisciplinary Description of Complex Systems* 20(5), 590-605.
- Jordan, C. E., Clark, S. J., & Waldron, M. A. (2021). Testing for earnings management in the US amid the COVID-19 pandemic. *Journal of Applied Business and Economics*, 23(5).
- Junuguru Srinivas, Naveen Kolloju, Akanksha Singh, Siriman Naveen & Sudhaveni Naresh (2024). The COVID 19 Pandemic and Its Impact on Sustainable Development Goals 2030. *Journal of the Knowledge Economy*.
- Kjærland, F., Kosberg, F., & Misje, M. (2021). Accrual earnings management in response to an oil price shock. *Journal of Commodity Markets*, 22, 100138.
- Kumar, M., & Vij, M. (2017). Earnings management and financial crisis: Evidence from India. *Journal of International Business and Economy*, 18(2), 84–101.

- Lassoued, N., & Khanchel, I. (2021). Impact of COVID-19 pandemic on earnings management: Evidence from financial reporting in European firms. *Global Business Review*, 09721509211053491.
- Liu, G., & Sun, J. (2022). The impact of COVID-19 pandemic on earnings management and the value relevance of earnings: *US evidence*. *Managerial Auditing Journal*, 37(7), 850–868.
- M. Archana, Manoj Kumar K, Meghana Varma & Mariam Fathimaali (2023) Impact of Pandemic on Foreign Direct Investment - A Study from Global Perspective. *International Journal for Science Technology And Engineering*, 11(11):1170-1177.
- Magoulis, G., Polychronidou, P., & Laskaridou, E. (2021). The Greek-Balkan Economic Cooperation During And After The Economic Crisis (2008-2018). A Comparative Analysis Of Gdp, Foreign Trade And Foreign Direct Investment. *Scientific Bulletin-Economic Sciences/Buletin Stiintific-Seria Stiinte Economice*, 20(1).
- MAI, S. R. A. (2020). Black swans: When the impossible occurs. *The Appraisal Journal*, 88(2), 140–148.
- Martínez-Galán, E., & Fontoura, M. P. (2019). Global value chains and inward foreign direct investment in the 2000s. *The World Economy*, 42(1), 175–196.
- Milan Džogan, Roman Lacko, Zuzana Hajduová (2025). Empirical research of foreign direct investments efficiency in the European Union on the edge of pandemic outbreak.
- Mingsong Sun, Shiling Yan, Tingting Cao & Jingwen Zhang (2024). The impact of COVID-19 pandemic on the world's major economies: based on a multi-country and multi-sector CGE model. *Frontiers in Public Health*.
- Mmasa, J.J. (2023). Short-Term Effects of COVID-19 on Foreign Direct Investment Influxes: Evidence from the United Republic of Tanzania. *Tanzania Journal of Agricultural Sciences*, 22(1), 52-67.
- Mohapatra, L. M., & Gopalaswamy, A. K. (2016). FDI, domestic investment and 2008 financial crisis: Evidence from emerging nations. *The Journal of Developing Areas*, 50(6), 277–289.
- Mold, A., & Mveyange, A. (2020). The impact of the COVID-19 crisis on trade: Recent evidence from East Africa.
- Muzuva, M. (2023). Foreign Direct Investments as a Solution to South Africa's Economic Growth. Durban University of Technology.
- Ozili, P. K., & Arun, T. (2023). Spillover of COVID-19: impact on the Global Economy. In Managing inflation and supply chain disruptions in the global economy (pp. 41–61). IGI Global.

- Patel, C. S. D., Patel, N. K., & Patel, N. K. (2020). COVID-19 and corporate governance (India): Practical issues, implications and new relief measures. *Implications and New Relief Measures* (September 11, 2020).
- Patrick, J. and M. Derefa (2024). "COVID-19 Pandemic and Earnings Management: Evidence from Non-Financial Firms in Tanzania and Kenya." *NG Journal of Social Development* **14**(1): 121-134.
- Pjaaka, C., & Brannan, H. B. (2022). Earnings management in European real estate firms. NTNU.
- Rizwan Firdos, Mohammad Subhan, Babu Bakhsh Mansuri, Majed Alharthi (2024). Unraveling the impact of COVID-19 pandemic on foreign direct investment and its determinants: empirical insights from SAARC countries. *Journal of Economic Studies*.
- Saheed Akande Shittu & Hakeem Olayinka Onifade (2023). Capital Structure and Earnings Management Practices: Empirical Analysis in Sub-Sahara Africa. *Journal of Finance and Accounting*, 11, (5).
- Sampaio-Oliveira, M., de Lima, M. P. M., Doriguêto, P. V. T., Americano, J. P., & Devito, K. L. (2023). Impacts of the COVID-19 pandemic on the routine of Brazilian oral radiologists. *Oral Radiology*, 39(3), 570–575.
- Seal, W. (2006). "Management accounting and corporate governance: An institutional interpretation of the agency problem." *Management Accounting Research* **17**(4): 389-408.
- Segundo Camino-Mogro and Mary Armijos (2020). The effects of COVID-19 lockdown on Foreign Direct Investment: evidence from Ecuadorian firms.
- Sinem Koçak & Özge Barış-Tüzemen (2022). Impact of the COVID-19 on foreign direct investment inflows in emerging economies: evidence from panel quantile regression. *Future Business Journal*, 8.
- Souha Kammoun, Y. Ben Romdhane (2022). Impact of government responses to COVID-19 on the resilience of FDI attractiveness factors in the Asian region. *Journal of Economic and Administrative Sciences*, 40(1).
- Spence, M. (1978). Job market signaling. *Uncertainty in economics*, Elsevier: 281-306.
- Stueck, M. (2021). The pandemic management theory. COVID-19 and biocentric development. *Health Psychology Report*, 9(2), 101–128.
- Surendra Singh (2023). Effect of COVID-19 pandemic on the inflow of FDI into Indian economy. *International Journal of Financial*

Management and Economics 6(1):99-103

- Tivatyi, K. S., Shou, J. M., & N'Souvi, K. (2022). Study on import and export-led economic growth: Cases of Botswana, Namibia, South Africa, and Zimbabwe in Southern Africa. *Open Journal of Business and Management*, 10(2), 670–700.
- Tsinaridze, R.; Beridze, L; Tsetsckhladze, L. (2021). Refinancing Rate And Its Impact On The Country's Economy In The Context Of The Covid Pandemic. *Economic Profile* 22(2).
- Veljanoska, F., & Mazahrih, B. (2023). The impact of COVID-19 on FDI. *International Journal of Business Performance Management*, 24(3–4), 315–343.
- Vennila R. (2021). Pre and post COVID-19 impact on foreign direct investments in India. *Journal of Archaeology of Egypt / Egyptology* 18(1):4741 - 4749
- Xiao, H., & Xi, J. (2021). The COVID-19 and earnings management: Chinas evidence. *Journal of Accounting and Taxation*, 13(2), 59–77.
- Xu, X.-W., Wu, X.-X., Jiang, X.-G., Xu, K.-J., Ying, L.-J., Ma, C.-L., Li, S.-B., Wang, H.-Y., Zhang, S., & Gao, H.-N. (2020). Clinical findings in a group of patients infected with the 2019 novel coronavirus (SARS-Cov-2) outside of Wuhan, China: retrospective case series. *Bmj*, 368.
- Yin, C., Salmador, M. P., Li, D., & Lloria, M. B. (2022). Green entrepreneurship and SME performance: The moderating effect of firm age. *International Entrepreneurship and Management Journal*, 18(1), 255–275.
- Yu, Z., Razzaq, A., Rehman, A., Shah, A., Jameel, K., & Mor, R. S. (2021). Disruption in global supply chain and socio-economic shocks: a lesson from COVID-19 for sustainable production and consumption. *Operations Management Research*, 1–16.
- Zixuan He (2023). The Impact of COVID-19 on Investors Behavior: Evidence from Risk-aversion, Herding Behavior, and Availability Bias. *Advances in Economics Management and Political Sciences*, 26(1):93-101.