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Pandemic (COVID-19) effect on financial statements: The role of government and organizations for future prevention

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Abstract

COVID-19 pandemic period impedes business operations and world economic growth. This type of pandemic may happen again in the future. Hence, the objectives of the study are to find out the pandemic effect on items in financial statements; to predict the future effect on items in the financial statements, and to find out the role of government and organizations for future prevention of the adverse effects on financial statements due to the pandemic. The analysis is based on a large number of publicly available sources, including research papers, governmental documents, and reports. The study has taken 8 ratios compared with 80 listed companies around the globe. During the pandemic period the magnitude of adverse effect on business operations depends upon the decision and actions of external bodies (WHO, governments) and internal ones (organizations) parties. The findings revealed that the role of government and organizations for future prevention of 'Pandemic Effect on Financial Statements' is vital to defend against future pandemic situations. This study has added a new discussion to the body of knowledge, i.e. examining pandemic (COVID-19) effect on business operational activities and its financial statements; hence, an approach that is not widely discussed in the previous studies.

Keywords: future prevention, financial statements, government, pandemic, COVID-19.

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Влияние пандемии (COVID-19) на финансовые показатели: роль правительства и организаций в предотвращении негативного влияния на стратегию компании

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Аннотация

Во время пандемии COVID-19 деловые операции и экономический рост сократились во всем мире. Поскольку пандемии могут снова произойти в будущем, необходимо понимать, какой эффект они оказывают на финансовые показатели выполнения стратегии; как можно определять и прогнозировать будущие эффекты и их влияние на снижение финансовых показателей выполнения стратегии и выявлять роль правительства и организаций в предотвращении негативного влияния на выполнение финансовых показателей стратегии. Анализ основан на большом количестве общедоступных источников, включая научно-исследовательские работы, правительственные документы и отчеты. Эмпирическое исследование основано на анализе восьми ключевых показателей 80 листинговых компаний во всем мире. Результаты показали, что роль правительства и организаций по будущему предотвращению негативных эффектов на финансовые показатели стратегии жизненно важны для защиты от влияния таких эффектов. Новизна исследования заключается в добавлении знаний по влиянию негативных эффектов пандемии (COVID-19) на деловые операции компаний и выполнение финансовых показателей стратегии; кроме того, используемый подход не обсуждался в предыдущих исследованиях и позволит прогнозировать влияние пандемии на выполнение финансовых показателей стратегии.

Ключевые слова: прогнозирование, финансовые показатели стратегии, правительство, пандемия, COVID-19.

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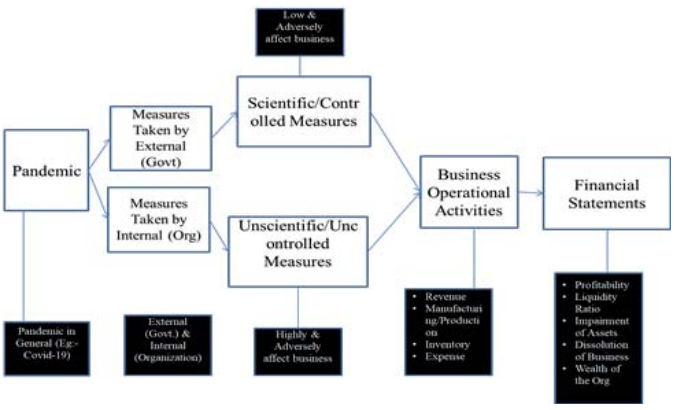
1. Introduction

Financial statements include income statements, statements of financial position, cash flow statements, and statements of equity shareholders. If there are no accurate, timely and regular financial statements, even if one who believes that the business is doing well, the business could not able to achieve their aim [Adrian, 2019; Mathuva et al., 2019]. Cash and profit are considered the lifeblood of any business [Mazzarol, Reboud, 2020]. Fair financial statements are helpful for stakeholders including managers, shareholders, investors, banks, government, tax inspectors, and so on to make the right decision [Davern et al.,

2019; Weetman, 2019]. The preparation of financial statements is compulsory as a legal requirement [Gahlot et al., 2019; Pelekh et al., 2020]. Unqualified audited financial statements ensure the presence of applicable accounting standards (International Accounting Standards – IAS) [Adrian, 2019; Jatmiko et al., 2019] and Generally Accepted Accounting Principles (GAAPs) [Routh et al., 2019]. These statements are used by different stakeholders for different decision-making [Weetman, 2019; Birt et al., 2020]. Concepts and a clear understanding of accounting, financial statements, and budgeting [Reichard, Küchler-Stahn, 2019] helped take the right decision at the proper time in order to direct the business towards its financial success [Birt et al., 2020].

Governments, income tax departments, security exchanges compel companies to prepare their financial statements on a quarterly basis [Mao, Wu, 2019] that might use company management to guide and control future financial requirements [Kajüter et al., 2019]. The COVID-19 pandemic impeded business operations [Koonin, 2020] and economic growth [Barro et al., 2020] around the world and it continues as a universal phenomenon [Crank et al., 2019]. Since the universe has faced many diseases in pandemic scales, it badly affects major business operational activities [Koonin, 2020]. It is obvious that the pandemic, say, novel coronavirus has been controlled by many countries [Wu, McGoogan, 2020], a lot of measures have been taken by both government (external) and business organizations (internal) [Zhang et al., 2020]. The measures taken by both external and internal bodies of such countries as Italy, the United States, Spain, Germany, France, and Iran have not limited the spread of COVID-19 among citizens [Zhou et al., 2020]. Pandemic leads to lockdowns in many countries that impede business operations [Kruger et al., 2020]. Still pandemic has less affected some businesses like food and pharma industries. This set of nosy challenges calls researchers to study the role of governments and organizations regarding financial statements according to the industry. Hence the objectives of the study are to find out the role of governments and organizations for future prevention, 'pandemic effect on financial statements, based on comparing current quarterly/yearly financial statements with previous ones in industries/organizations; and to predict the future effect on such organizational financial statements. Later, financial statements were compared to the pandemic effect on the economy that highlights the role of governments and organizations for future prevention.

Fig. 1. Schematic diagram of research framework
Рис. 1. Принципиальная схема структуры исследования



The study has proposed an innovative framework in which it defined four major independent variable measures taken by external bodies (governments, WHO), internal institutions (organizations), scientific and controlled measures, unscientific and uncontrolled measures that affect dependent variables (business operational activities and financial statements). The current study chose these four essential independent elements (factors) to represent the characteristics for certain reasons. These are all the important factors influencing business operations as well as financial statements in general. Hence the following theoretical framework has been developed. The relationship measures taken by external bodies (governments), internal institutions (organizations), scientific and controlled measures, unscientific and uncontrolled measures with business operational activities and Financial Statements are shown in fig. 1.

2. Literature review

Comparative or common-size income statement and statement of financial position help to understand the causes of differences in operational financial performance between two periods [Dinçer et al., 2018; Salma, Hussain, 2018; Robinson, 2020] and can be used to predict future trend [Chen et al., 2018; Linares-Mustarós et al., 2018; Hosaka, 2019]. Accounting ratios and trend analysis can be used for more threadbare and predicted future analysis [Jayasekera, 2018; Le, Viviani, 2018; Linares-Mustarós et al., 2018; Bateni, Asghari, 2020]. Comparing financial statements with two periods helps to prepare forecasted financial statements [Hasanaj, Kuqi, 2019; Henry et al., 2020; Thottoli, 2021a; 2021b]. An effective analysis of financial statements leads to understanding the value of a business. [Ani, Odo, 2019] analyzed current financial statements to predict the profitability and risk of an organization [Kamar, Fatihah, 2018; Waqas, Md-Rus, 2018; Ali, Puah, 2019; Campbell et al., 2019]. Effective analysis of financial statements helps to assess the quality of the firm's financial statements [Cantele, Zardini, 2018; Muda et al., 2018; Robinson, 2020]. Financial statement analysis helps to understand the operational performance of any company [Marjanović et al., 2018]. Identifying industry and economic characteristics is possible using the analysis of financial statements [Müller et al., 2018]. The interim financial report predicts future effect on organizational financial statements [Nainggolan, 2018].

In normal economic conditions, most successful organizations continue to operate their business the same or better way. It has been found that organizational operational activities are adversely affected during the outbreak of any pandemic, which is now a normal phenomenon in every decade [Bhardwaj, 2020]. Pandemic will negatively affect organizations' operational, financial, and revenue aspects [Williams, Kayaoglu, 2020]. The task of organizations is to take all the necessary measures to prevent pandemic situations, and it depends on the governments and tax authorities' situational decisions/actions through implementing emergency rules/decrees/orders [Di Saverio et al., 2020; Saleh et al., 2020]. The governments with reserve banks may implement supportive financial measures to overcome adverse economic consequences especially during a pandemic such as a Coronavirus disease 2019 [Adams, Walls, 2020]. Since pandemic is a social and communal influential factor, the organization and its employees

should also take scientific and controlled measures to eliminate such situations within a short period of time [Alabdullah et al., 2020; Cirrincione et al., 2020; Tan et al., 2020].

2.1. Business operational activities and financial statements

Business operational activities are the core daily routine that an organization needs to pay attention to in order to get revenues. Manufacturing or production, selling, administration, marketing [Thottoli, Thomas, 2021], customer services are some of the operational activities of any organization. Well-planned operational activities help organizations to achieve better cash flows and to maintain and/or increase the net income of the business. Financial statements help make smart business move and keep value and reputation [O'Brien, 2019]. Financial statements are the basis to get a loan or attract investors. Thus, it is important for any business to keep an eye on its operational activities much better than before. Operational activities are the principal revenue-producing activities [Hasanaj, Kuqi, 2019; Yosvid, 2020].

2.2. Scientific and controlled measures taken by external (governments and WHO)

Social awareness is considered to be the first step that government has to take as an initiative. Basic facilities such as food, masks, soap, sanitation materials and so on should be provided at the grass root level by the government especially to the underprivileged and downtrodden living in slum areas. Healthcare and adequate testing facilities in every ward in the country need to be provided by the local government or authorities. Governments should take an initiative to identify and isolate violators whenever required using strict policy. After all strict follow-up action against the lockdown, violators are to be followed up. Stay-at-home orders, business closures, and travel restrictions are brought in by heads of health emergencies to counteract the spread of COVID-19. WHO is currently taking precautionary measures/advice to protect people from the spread of COVID-19. Interventions, such as intensive contact tracing followed by quarantine and isolation, can effectively reduce the spread of COVID-19. Under the most restrictive measures, the outbreak is expected to peak within two weeks (since January 23, 2020) with a significantly low peak value. With travel restrictions (no transportation of exposed individuals to Beijing), the number of infected individuals in seven days will decrease by 91.14% in Beijing, compared to the scenario of no travel restriction. Collaborative efforts are required to combat the novel coronavirus, focusing on both persistent strict domestic interventions and vigilance against exogenous imported cases. Community-wide containment is an intervention applied to an entire community, city, or region, aimed at reducing personal interactions, except for minimal interaction to ensure vital supplies. From a policy perspective, understanding whether and how communities respond to government actions is crucial. Socialization of coronavirus in the USA reveals that fear about the pandemic disease has taken initiatives from the governmental side to the society and general people, placing pressure among prospective customers and heading to regulatory reaction and a substantial societal backlash [Andriani, 2020; Brammer et al., 2020]. These measures help return to the normal situation which will, in turn, help increase the turnover of the business. These scientific and controlled measures taken by the governments and WHO can lead to the economic growth in short term. Hence, it is hypothesized that:

H1: During pandemic period scientific and controlled measures taken by external bodies (governments and WHO), adversely affect business operational activities and financial statements.

2.3. Unscientific and uncontrolled measures taken by external (governments & WHO)

Research on China and South Korea shows, that early governmental action and cooperation with the population can slow down the uncontrolled spread of the pandemic. A weak approach of government to control the pandemic may lead to communal spreading. Improper measures at the initial stage by the government may lead to the spreading of the virus in the society. Poorly tested facilities are another inability of the country to control the spreading of the virus. A situational communication/instruction of good health and safety measures during the pandemic period is important to avoid the spread of such viruses. The measures should be taken by local/state/health organizations as soon as possible before spread of the disease in the community. This can be evident that in countries like the UK and the the US, the governments were swift to institute scientific controlled measures to alleviate corporate debt [Amankwah-Amoah et al., 2021]. Hence, it is hypothesized that:

H2: During the pandemic period unscientific and uncontrolled measures taken by external bodies (governments and WHO) adversely affect business operational activities and financial statements.

2.4. Scientific and controlled measures taken by internal institutions (organizations)

To sustain and thrive in uncertain times brought forward by COVID-19, organizations must explore new ways of cooperation. This has placed a spotlight on the need for corporate resilience and the ability to embrace virtual collaboration tools and practices. The researcher has observed that most of the companies have to require digital technologies to reduce office hours. It is not necessary for organizations to operate with a 100 percent presence of employees. They have implemented social distancing and quarantine measures. The staff is working from different locations, either in the office or at home. Staff members who have returned from abroad or who have even mild cold symptoms are working from home for a minimum of 14 days. All business trips are suspended. Digital tools for internal and external meetings are used, and reception of visitors is stopped. Public events and seminars are not organized. This makes the companies remain operational and continue making disbursements to its customers. It is necessary to follow recommendations published by WHO. Ban on lunch breaks to avoid crowds has been introduced. Masks and hand sanitizers should be given to all employees. Close and constant monitoring of international developments, including instructions issued by relevant local and national authorities should be observed. Internal task forces in the areas of operations, business, and general crisis management were formed. This continues to operate

a business without much disturbance [Untaru, Han, 2021]. It was found out that the scientific and controlled measures taken by organizations against the COVID-19 virus positively affected both customer safety and business operations. Hence, it is considered that:

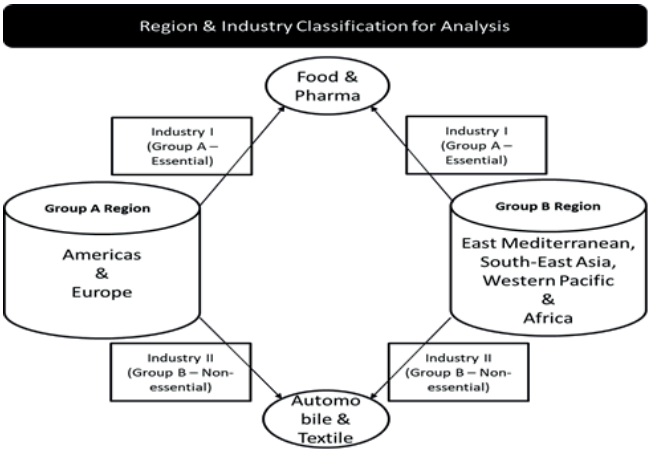
H3: During pandemic period scientific and controlled measures taken by internal (organization), adversely affect business operational activities and financial statements.

2.5. Unscientific and uncontrolled measures taken by internal institutions (organizations)

An effective Business Continuity Management (BCM) program is a critical component of successful business management. Experience shows that typically over 50 percent of businesses without an effective business continuity plan will ultimately fail following a major disruption. Thermal screening is mandatory for all the staff. If there are no strategies using a cost-effective approach, and without taking into consideration key resources or critical activities, people, Information Communication Technology (ICT), supplies, and facilities may adversely affect business operations. Product packing and production information should be looked into if it is necessary. Unreasonable dismissal of an employee who has care-giving obligations related to COVID-19 may spoil business. Not providing employees with adequate resources to work from home is another key area. Many organizations are now requiring their staff to work from home, which can further increase the risk as enterprise network security safeguards are not always available to home-users, and some users may be forced to use their systems at home that may not have the same level of protection. Despite the working conditions, employees must be especially vigilant right now for malicious attacks that attempt to exploit the pandemic and people's fears. This is important for both working in the office and at home. This concept has been supported by [Hu et al., 2021]. The researchers expressed the idea that failure to obey COVID-19 organizational protection measures may jeopardize the health and protection of employees, business operations, and the public. Hence, it is hypothesized that:

H4: During pandemic period unscientific and uncontrolled measures taken by internal institutions (organizations), adversely affect business operational activities and financial statements.

Fig. 2. Region & Industry classification for analysis
Рис. 2. Классификация регионов и отраслей для анализа



3. Methods

The analysis is based on a large number of publicly available sources, including research papers, government documents, and reports. The paper aims to triangulate the validity of the data with multiple sources. The study has taken 8 ratios compared with 80 listed companies around the globe. Further, as a part of the methodology, the current study has used secondary data after considering organizations' current quarterly financial statements with previous ones to reach the predicted financial results. This result has later been cross-compared with pandemic (COVID-19) affected (according to the data of COVID-19 statistics provided by World Health Organization – WHO) economies. Organizations were grouped geographically as well as industry types. During the pandemic period, the magnitude of adverse effect on business operations depends upon the decision and actions of external bodies (WHO, governments) and internal institutions (organizations).

In this study, industries were grouped under essential (Group A) and non-essential (Group B) during the pandemic. Food and Pharma (Industry I) industries are grouped as essential industries whereas Automobile and Textile (Industry II) industries are grouped as non-essential industries during the pandemic period. For industry sample selection, the regions were segregated ac-

Table 1
List of accounting ratios used as variable
Таблица 1
Коэффициенты, используемые в качестве переменных

Ratio class	Ratio name	Notation	Formula
Profitability ratios	Gross Profit Ratio	GPR	Gross profit/revenue
	Operating Profit Margin	OPM	Operating profit/revenue
	Net Profit Ratio	NPR	Net profit/revenue
	Return on assets	ROA	Net income/average assets
	Return on Capital Employed	ROCE	Avg. capital employed/net profit
Liquidity Ratio	Current Ratio	CR	Current assets/current liabilities
	Acid Test (Quick) Ratio	ATR	Quick assets/current liabilities

Source: [Olson, Zoubi, 2008].

Table 2
COVID cases comparison (WHO Region)
Таблица 2
Сравнение случаев COVID

Group	WHO Region	Confirmed Cases	Percentage (%)	
Group A Region	Americas	3084517	47	81
	Europe	2211148	34	
Group B Region	Eastern Mediterranean	587030	9	19
	Southeast Asia	322863	5	
	Western Pacific	188393	3	
	Africa	121104	2	
	Total	6515796	100	

Sources: calculated by the author as per the data (WHO Coronavirus Disease (COVID-19) Dashboard, Data last updated: 2020/6/5, 10:41 am CEST).

Fig. 3. COVID cases comparison (WHO Region)
Рис. 3. Сравнение случаев COVID

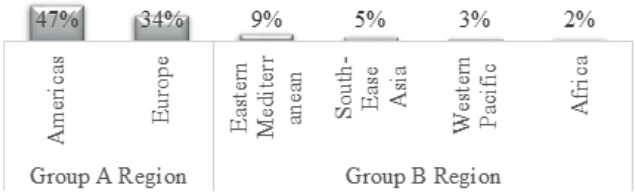
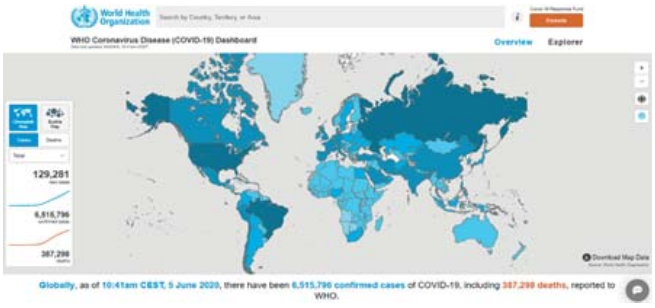


Fig. 4. WHO coronavirus disease (COVID-19) dashboard, Data last updated: 2020/6/5, 10:41 am CEST
Рис. 4. Информационная панель ВОЗ по заболеванию коронавирусом (COVID-19), последнее обновление данных 2020/6/5



Source: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public.

Fig. 5. WHO coronavirus disease (COVID-19) dashboard, Data last updated: 2020/6/5, 10:41am CEST[1])
Рис. 5. Информационная панель ВОЗ по заболеванию коронавирусом (COVID-19), последнее обновление данных 2020/6/5

Source: https://covid19.who.int/?gclid=EAIaIQobChMI_M3Cutrq6QIVCIBQBh2BkQVREAAYASAAEgKSY_D_BwE.

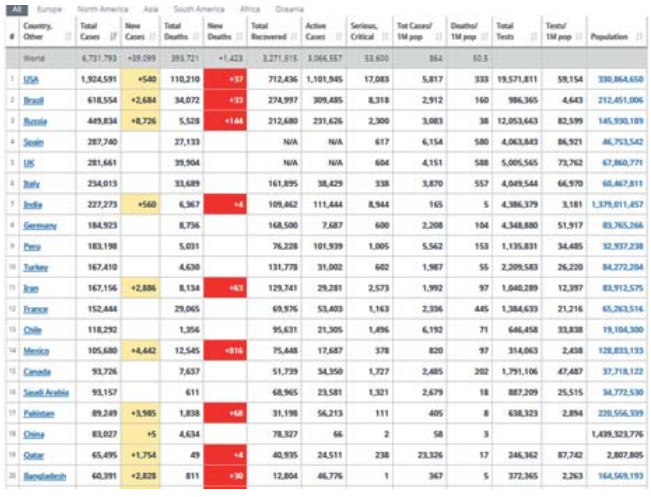
cording to groupings made by WHO based on COVID-19 confirmed cases (fig. 1 and fig. 2). Americas and Europe appeared as one group, Group A Region, and rest of the region (Southeast Asia, Western Pacific, and Africa) formed another group, Group B Region. The study investigates two industries in each region, where 20 companies in every industry were taken as a sample, and the total number consists of 80 companies. The sample for the study has limited to 80 since there is not enough published financial information during the current study.

3.1. Variables of the research and its measurements

This study has used various measurements (accounting ratios) as variables for assessing the financial performance of any organization (fig. 2 and table 1, list of accounting ratios used for the analysis [Olson, Zoubi, 2008]):

The paper also takes impairment of assets of various selected companies for comparative analysis.

Fig. 6. WHO coronavirus disease (COVID-19) dashboard, Data last updated: 2020/6/5, 10:41 am CEST)
Рис. 6. Информационная панель ВОЗ по заболеванию коронавирусом (COVID-19)



#	Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical	Tot Cases/ 1M pop	Deaths/ 1M pop	Total Tests	Tests/ 1M pop	Population
	World	6,731,793	+39,099	393,721	+1,423	3,271,515	3,066,557	53,600	864	50.5			
1	USA	1,924,591	+540	110,210	+37	712,436	1,101,945	17,083	5,817	333	19,571,811	59,154	330,864,650
2	Brazil	618,554	+2,684	34,072	+33	274,997	309,485	8,318	2,912	160	986,365	4,643	212,451,006
3	Russia	449,834	+8,726	5,528	+144	212,680	231,626	2,300	3,083	38	12,053,643	82,599	145,930,189
4	Spain	287,740		27,133		N/A	N/A	617	6,154	580	4,063,843	86,921	46,753,542
5	UK	281,661		39,904		N/A	N/A	604	4,151	588	5,005,565	73,762	67,860,771
6	Italy	234,013		33,689		161,895	38,429	338	3,870	557	4,049,544	66,970	60,467,811
7	India	227,273	+560	6,367	+4	109,462	111,444	8,944	165	5	4,386,379	3,181	1,379,011,457
8	Germany	184,923		8,736		168,500	7,687	600	2,208	104	4,348,880	51,917	83,765,266
9	Peru	183,198		5,031		76,228	101,939	1,005	5,562	153	1,135,831	34,485	32,937,238
10	Turkey	167,410		4,630		131,778	31,002	602	1,987	55	2,209,583	26,220	84,272,204
11	Iran	167,156	+2,886	8,134	+63	129,741	29,281	2,573	1,992	97	1,040,289	12,397	83,912,575
12	France	152,444		29,065		69,976	53,403	1,163	2,336	445	1,384,633	21,216	65,263,516
13	Chile	118,292		1,356		95,631	21,305	1,496	6,192	71	646,458	33,838	19,104,300
14	Mexico	105,680	+4,442	12,545	+815	75,448	17,687	378	820	97	314,063	2,438	128,833,133
15	Canada	93,726		7,637		51,739	34,350	1,727	2,485	202	1,791,106	47,487	37,718,122
16	Saudi Arabia	93,157		611		68,965	23,581	1,321	2,679	18	887,209	25,515	34,772,530
17	Pakistan	89,249	+3,985	1,838	+68	31,198	56,213	111	405	8	638,323	2,894	220,556,339
18	China	83,027	+5	4,634		78,327	66	2	58	3			1,439,323,776
19	Qatar	65,495	+1,754	49	+4	40,935	24,511	238	23,326	17	246,362	87,742	2,807,805
20	Bangladesh	60,391	+2,828	811	+30	12,804	46,776	1	367	5	372,365	2,263	164,569,193

Source: https://covid19.who.int/?gclid=EAIaIQobChMI_M3Cutrq6QIVCIBQBh2BkQVREAAYASAAEgKSY_D_BwE.

[1] https://covid19.who.int/?gclid=EAIaIQobChMI_M3Cutrq6QIVCIBQBh2BkQVREAAYASAAEgKSY_D_BwE. Date of access: 5-6-2020.

4. Results and discussion

As per the WHO COVID-19 dashboard, there are 6,515,796 confirmed cases reported around the world at the time of this study (2020.06.05). Among them, 3,084,517 confirmed cases (which is around 47%) are widespread in Americas and 2,211,148 confirmed cases (which are 34%) exist in Europe. Hence, 81% of confirmed cases are in Group A Region. Whereas remaining 19% confirmed cases are from Group B Region (table 2, fig. 3–6).

Table 3
Group A & Group B, Industry I
Таблица 3
Группы А и В, отрасль I

Company	Group A, Industry I	Group B, Industry I	Group A, Industry I	Group B, Industry I	Group A, Industry I	Group B, Industry I	Group A, Industry I	Group B, Industry I	Group A, Industry I	Group B, Industry I
	Gross Profit Ratio	Gross Profit Ratio	Operating Profit Margin	Net Profit Margin	Net Profit Ratio	Net Profit Ratio	Return on Assets	Return on Assets	Return on Capital Employed	Return on Capital Employed
	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)	(Q1,'19) (Q1,'20)
1	44.15 44.14	27.78 19.76	15.39 15.06	27.05 -14.40	11.04 9.75	22.90 -11.79	1.81 1.59	1.62 -1.21	9.24 7.77	2.50 -1.02
2	66.25 69.83	2.95 7.02	24.92 17.67	2.95 7.02	6.78 6.19	0.19 5.64	0.40 0.57	0.05 0.53	0.40 0.57	0.08 1.46
3	59.66 56.54	24.48 23.14	0.67 0.64	4.94 5.29	19.98 11.29	9.08 2.29	1.42 1.18	0.58 0.45	1.42 1.18	1.55 1.18
4	55.74 57.46	4.05 6.64	21.76 18.79	0.56 2.58	15.09 13.51	0.20 1.75	5.74 5.06	0.07 0.46	5.74 5.06	0.08 0.52
5	18.99 17.96	10.12 18.91	1.45 2.78	11.85 26.27	-0.04 -0.05	5.07 10.48	-0.01 -0.01	0.45 1.07	-0.01 -0.01	1.06 2.46
6	17.44 16.82	20.75 39.76	2.17 -1.99	2.70 1.81	1.09 -2.18	22.72 35.41	2.02 -5.52	2.41 2.41	0.79 -1.48	2.58 5.92
7	50.87 29.15	2.16 26.82	8.85 11.38	2.72 15.75	5.61 6.94	0.57 0.45	0.58 0.80	0.06 0.06	0.87 1.86	0.16 0.18
8	2.87 2.50	52.83 41.99	2.87 2.50	7.54 4.42	0.44 0.27	4.53 7.51	0.51 0.27	0.85 1.52	1.83 0.74	2.27 3.98
9	3.07 -2.62	3.41 4.28	3.07 -2.62	0.64 3.15	0.73 -5.42	0.20 3.20	0.21 -1.36	0.07 0.79	0.30 -1.83	0.08 0.94
10	9.51 8.92	6.67 18.28	10.13 8.23	23.71 49.15	3.74 3.19	5.07 4.35	0.67 0.57	0.43 0.42	1.00 0.82	1.06 1.02
11	32.95 32.30	2.80 0.27	29.65 28.35	5.81 -6.51	29.61 28.28	31.11 44.29	2.32 2.04	1.99 4.19	5.62 4.83	3.53 6.84
12	0.00 0.03	3.46 2.55	4.51 3.56	4.75 11.49	92.13 93.93	0.12 6.96	2.19 3.51	0.02 0.84	4.02 6.28	0.05 2.79
13	42.56 43.29	22.60 88.35	44.50 36.10	10.05 2.21	37.27 27.72	4.53 1.10	3.19 2.57	0.83 0.21	4.40 3.47	2.27 0.59
14	44.48 38.22	1.32 9.52	44.48 38.22	0.76 2.83	35.85 29.62	0.19 2.84	3.34 2.96	0.06 0.60	5.44 4.62	0.07 0.84
15	26.32 -35.47	6.38 6.84	26.32 -35.47	24.03 51.44	16.77 -29.52	2.67 22.86	1.54 -3.03	0.22 2.14	1.82 -3.60	0.56 5.37
16	23.25 41.80	2.87 31.87	38.45 41.80	9.39 -0.01	31.37 34.92	11.71 -0.01	2.76 3.30	0.63 0.00	26.06 28.71	1.33 0.00
17	43.06 52.63	0.49 0.26	40.37 39.59	2.10 2.11	40.37 39.59	4.01 4.21	5.17 5.36	0.43 0.33	10.24 10.81	1.71 1.69
18	6.45 4.32	4.10 51.76	6.45 4.32	15.13 0.88	-5.32 -3.28	12.68 8.84	-0.09 -0.10	1.58 1.97	-0.14 -0.18	6.37 4.69
19	29.75 30.55	0.41 0.66	29.75 30.55	0.09 2.83	21.46 22.66	0.20 2.83	1.58 1.81	0.04 0.01	2.93 3.34	0.08 0.83
20	-87.79 -109.83	0.99 0.85	-87.99 -15.29	14.76 5.81	-88.08 -15.99	4.99 18.08	-4.20 -0.59	0.45 1.77	-5.11 -0.95	1.04 4.25

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

The findings show a high spread of the virus in Group A Region in comparison to Group B Region. 81% confirmed cases fall under Group A Region, whereas 19% confirmed cases are under Group B Region. This result depends on the measures taken by external (governments) and internal organizations. Unscientific/uncontrolled measures taken by Group A region lead to spreading of virus whereas scientific/controlled measures taken by Group B region resulted in low spread of the virus.

4.1. Group A & Group B, Industry I

Group A region (Americas and Europe) and Group B (Southeast Asia, Western Pacific, and Africa) region, considering 20 selected companies from each Group under Industry type I (essential products such as food and pharma), showed a comparative result as discussed below:

Table 3, Gross profit Ratio (Group A, Industry I and Group B, Industry I) does not show many variations in Industry I in both regional groups.

The result shows that the industries producing essential products such as food and pharmaceuticals have not faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company was keeping stable gross profit in comparison to Q 2020 and Q 2019.

Table 3, Operating profit margin (Group A, Industry I and Group B, Industry I) does not show many variations in Industry I in both regions A and B.

The result prooves that the industries producing essential products such as food and pharmaceuticals have not faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company was keeping a stable operating margin in comparison to Q 2020 and Q 2021.

Table 3, Net profit margin (Group A, Industry I and Group B, Industry I) shows slight variations in Industry I in both regions A and B.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep a stable net profit margin in comparison to Q 2020 and Q 2019.

Table 3, Return on assets (Group A, Industry I and Group B, Industry I) shows a decreasing trend in Industry I in region B in comparison to region A.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced negative effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep a stable return on assets in comparison to Q 2020 and Q 2019.

Table 3, Return on capital employed (Group A, Industry I and Group B, Industry I) shows a decreasing trend in Industry I in region B in comparison to region A.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep a stable return on capital employed in comparison to Q 2020 and Q 2019.

Table 4, Current ratio (Group A, Industry I and Group B, Industry I) shows no much variations in Industry I in both regions A and B.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep stable current assets in comparison to Q 2020 and Q 2019.

Table 4
Group A & Group B, Industry I
Таблица 4
Группы А и В, отрасль I

Company	Group A, Industry I		Group B, Industry I		Group A, Industry I		Group B, Industry I		Group A, Industry I		Group B, Industry I	
	Current Ratio		Current Ratio		Acid Test Ratio		Acid Test (Quick) Ratio		Working Capital Ratio		Working Capital Ratio	
	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)
1	0.86	1.10	4.79	3.54	0.84	1.09	4.20	3.00	-0.04	0.03	8.00	5.56
2	1.03	1.48	1.43	1.46	0.97	1.45	0.78	1.27	0.00	0.04	0.00	0.00
3	0.50	0.53	1.28	1.32	0.33	0.39	1.01	1.02	-0.12	-0.12	0.28	0.25
4	1.05	0.99	2.14	2.19	0.65	0.70	0.96	1.06	0.01	0.00	1.14	1.26
5	1.50	1.58	0.76	0.93	0.83	0.98	0.48	0.61	0.08	0.10	0.00	0.00
6	1.38	1.94	4.79	4.47	0.77	1.23	4.20	3.84	0.28	0.48	8.00	7.75
7	1.73	1.67	1.43	0.52	1.33	1.36	0.78	0.39	0.10	0.10	0.01	0.16
8	0.62	0.66	1.28	2.18	0.32	0.35	1.01	1.81	-0.10	-0.06	0.31	0.92
9	0.98	1.59	2.14	1.63	0.83	1.42	0.96	0.85	0.00	0.09	1.12	0.96
10	1.20	1.31	0.76	0.22	0.65	0.80	0.48	0.18	0.04	0.07	0.00	0.00
11	0.88	1.03	4.79	4.00	0.66	0.78	4.20	3.37	-0.03	0.01	0.77	0.64
12	1.26	1.31	1.43	33.46	1.01	1.05	0.78	29.87	0.06	0.07	0.49	0.32
13	3.10	3.04	1.28	1.88	3.01	2.92	1.01	1.76	0.33	0.30	0.19	0.45
14	1.44	1.59	2.14	3.01	1.16	1.28	0.96	1.00	0.09	0.11	0.76	2.20
15	4.47	3.83	0.76	1.98	4.26	3.62	0.48	1.44	0.23	0.22	0.00	0.00
16	3.18	3.14	4.79	3.78	3.06	3.03	4.20	3.18	0.38	0.39	0.80	0.62
17	1.72	1.73	1.43	1.19	1.56	1.54	0.78	0.90	0.13	0.13	0.89	0.86
18	8.24	4.54	1.28	3.41	8.13	4.49	1.01	2.95	0.66	0.57	0.22	0.78
19	2.94	3.31	2.14	3.59	2.78	3.16	0.96	3.17	0.27	0.33	0.25	0.32
20	5.55	8.31	0.76	4.77	4.90	7.75	0.48	4.50	0.66	0.76	0.33	0.09

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

Table 4, Acid test (Quick) ratio (Group A, Industry I and Group B, Industry I) shows a decreasing trend in Industry I in region B in comparison to region A.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep stable quick assets in comparison to Q 2020 and Q 2019.

Table 4, Working capital ratio (Group A, Industry I and Group B, Industry I) does not show many variations in Industry I in both regions A and B.

The result proves that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the company could not be able to keep stable working capital in comparison to Q 2020 and Q 2019.

Table 5, Impairment of assets (Group A, Industry I and Group B, Industry I) shows an increasing trend in Industry I in region B compared to region A.

The result shows that the industries producing essential products such as food and pharmaceuticals have faced adverse effects on their business operational activities as well as their financial statements. Therefore, the companies are having impairment of assets at a higher rate compared to Q 2020 and Q 2019.

Results of the tested hypothesis

Scientific and controlled measures taken by external bodies (governments and WHO), adversely affected business operational activities and financial statements. Scientific and controlled measures taken by internal institutions (organizations), negatively affected business operational activities and financial statements. Therefore, H1 and H3 are supported.

Table 5
Group A & Group B, Industry I
Таблица 5
Группы А и В, отрасль I

	Group A, Industry I	Group B, Industry I
Company	Imapairement of Assets (Change (Q1,'20)	Imapairement of Assets (Change (Q1,'20)
1	46.15	0.0
2	3.98	-12.5
3	-20.00	9.6
4	4.81	-10.0
5	-0.45	0.0
6	-1.96	20.0
7	11.11	0.0
8	16.67	8.4
9	100.00	-30.0
10	20.00	20.0
11	73.33	-41.0
12	-0.64	3.4
13	11.11	-3.6
14	0.00	20.0
15	100.00	-28.6
16	0.00	-20.0
17	-9.80	0.0
18	13.33	7.2
19	0.00	-1.0
20	9.52	-8.3

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

4.2. Group A and Group B, Industry II

Group A region (Americas and Europe) and Group B (Southeast Asia, Western Pacific, and Africa) region, results of 20 selected companies from each Group A and B in Industry type II (non-essential products such as automobiles and textile products), showed a comparative result as discussed below:

Table 6, Gross profit ratio (Group A, Industry II and Group B, Industry II) shows that there is a slight adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobiles and textile products have faced adverse effects on their business operational activities as well as their financial statements in region A (badly affected by virus, COVID-19). Therefore, the company could not keep a stable gross profit in comparison to Q 2020 and Q 2019.

Table 6, Net profit margin (Group A, Industry II and Group B, Industry II) shows that there is highly adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential products such as automobiles and textile have faced negative effects on their business operational activities as well as their financial statements in region A. Therefore, the company could not keep a stable net profit margin in comparison to Q 2020 and Q 2019.

Table 6, Net profit ratio (Group A, Industry II and Group B, Industry II) shows that there is highly adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential products such as automobiles and textile have faced adverse effects on their business operational activities as well as their financial statements in region A. Therefore, the company could not keep a stable net profit in comparison to Q 2020 and Q 2019.

Table 6, Return on assets (Group A, Industry II and Group B, Industry II) shows that there is highly adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobiles and textile goods have faced adverse effects on their business operational activities as well as their financial statements in region A. Therefore, the company could not get a stable return on assets in comparison to Q 2020 and Q 2019.

Table 6
Group A & Group B, Industry II
Таблица 6
Группы А и В, отрасль II

	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II	Group A, Industry II	Group B, Industry II
Company	Gross Profit Ratio (Q1,'19)	Gross Profit Ratio (Q1,'20)	Net Profit Margin (Q1,'19)	Net Profit Margin (Q1,'20)	Net Profit Margin (Q1,'19)	Net Profit Margin (Q1,'20)	Net Profit Ratio (Q1,'19)	Net Profit Ratio (Q1,'20)	Return on Assets (Q1,'19)	Return on Assets (Q1,'20)	Return on Assets (Q1,'19)	Return on Assets (Q1,'20)	Return on Capital Em (Q1,'19)	Return on Capital Em (Q1,'20)	Return on Capital Em (Q1,'19)	Return on Capital Em (Q1,'20)
1	46.59	44.49	44.19	43.47	65.68	43.65	7.04	2.91	15.97	-19.57	4.85	1.62	0.21	(0.17)	1.27	0.96	0.77	-0.72	4.02	1.25
2	5.56	2.43	22.22	21.77	4.77	1.88	2.31	1.27	4.44	1.71	1.86	0.41	1.81	0.59	2.31	0.51	2.96	1.03	60.65	1.27
3	0.49	0.44	107.53	108.34	-2.34	-29.98	-45.70	-74.42	-2.61	-21.87	-45.10	-2.77	-0.88	-6.86	-2.11	-0.09	-1.67	-12.94	-2.78	-0.17
4	20.29	19.61	50.04	51.02	10.29	8.29	1.77	4.90	6.24	5.66	1.57	9.51	1.65	1.96	0.66	1.05	2.51	2.02	1.34	9.25
5	8.96	8.24	4.25	5.45	0.68	-0.78	5.67	4.57	2.44	-11.20	2.78	2.53	0.79	-2.89	0.60	0.00	1.91	-5.76	0.60	0.00
6	60.51	54.42	6.59	97.09	-3.71	-45.09	3.66	22.50	-2.61	-50.30	8.21	1.24	-0.54	-7.42	2.16	0.28	-1.79	-30.59	6.83	0.95
7	35.53	17.41	19.67	19.45	5.82	-19.23	1.75	3.99	1.52	-17.96	2.15	0.03	0.36	-3.15	2.66	0.04	0.64	-0.25	69.78	0.10
8	25.59	26.97	88.66	86.08	6.77	6.63	-4.59	-0.01	4.98	4.83	-0.21	-7.90	0.91	0.83	-0.01	-0.27	1.26	1.18	-0.01	-0.35
9	36.51	37.95	89.24	14.62	15.95	16.79	1.97	1.82	11.70	3.22	1.38	1.69	1.99	0.51	0.58	0.50	2.62	0.66	1.17	1.57
10	60.51	54.42	2.10	3.85	-3.71	-45.09	3.20	4.95	-2.49	-50.28	0.68	1.10	-0.52	-7.41	0.00	0.00	-0.67	-10.53	0.00	0.00
11	60.51	50.30	37.42	6.40	-3.71	-45.15	6.03	2.22	-2.49	-52.75	3.47	0.36	-0.52	-7.78	0.91	0.08	-0.67	-11.05	2.89	0.27
12	35.53	35.55	19.42	2.16	5.82	-31.32	0.06	0.58	1.52	-24.00	1.86	0.29	0.36	-4.21	2.31	0.36	0.04	-0.33	60.65	0.90
13	35.53	38.92	88.20	102.76	5.82	-41.31	36.92	0.86	1.52	-47.61	0.00	-7.05	0.36	-6.32	0.00	-0.24	0.04	-0.50	0.00	-0.29
14	60.51	75.03	46.12	32.82	-3.71	-45.15	17.65	3.64	-2.49	-52.34	0.40	1.87	-0.52	-7.72	0.17	0.35	-0.67	-10.96	0.34	1.74
15	8.96	6.67	3.67	4.95	0.68	-1.00	3.67	54.49	2.44	-16.50	0.68	0.66	0.79	-3.98	0.00	0.00	1.91	-7.93	0.00	0.00
16	60.51	50.30	34.03	37.17	-3.71	-45.15	4.67	3.71	-2.49	-52.75	2.46	1.49	-0.52	-7.78	0.64	0.33	-0.67	-11.05	2.04	1.13
17	60.51	53.13	19.42	13.02	-3.71	-59.70	1.75	2.92	-2.61	-50.21	1.02	0.29	-0.54	-10.45	1.27	0.36	-1.79	-43.12	33.27	0.90
18	35.53	17.41	87.85	95.50	5.82	-19.23	-4.41	-0.01	1.52	-17.96	19.72	8.57	0.36	-3.15	0.92	0.29	0.04	-0.25	1.22	0.36
19	8.96	8.40	30.43	36.46	0.68	-2.33	3.93	1.41	2.44	-15.55	1.18	3.50	0.79	-4.02	0.50	1.05	1.91	-8.01	1.00	3.24
20	8.96	9.42	9.15	4.40	0.68	-9.89	55.66	4.40	2.44	-11.98	1.26	1.95	0.79	-3.09	0.00	0.00	1.91	-6.16	0.00	0.00

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

Table 6, Return on capital employed (Group A, Industry II, and Group B, Industry II) shows that there is highly adverse variation among Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobiles and textile goods have faced adverse effects on their business operational activities as well as their financial statements in region A.

Therefore, the company could not get a stable return on capital in comparison to Q 2020 and Q 2019.

Table 7, Current ratio (Group A, Industry II and Group B, Industry II) shows that there is highly adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobiles and textile goods have faced adverse effects on their business operational activities as well as their financial statements in region A. Therefore, the company could not be able to maintain adequate current assets in comparison to Q 2020 and Q 2019.

Table 7, Acid-test (Quick) ratio (Group A, Industry II and Group B, Industry II) shows that there is highly adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobiles and textile goods faced adverse effects on their business operational activities as well as their financial statements in region A. Therefore, the company could not be able to maintain adequate quick assets in comparison to Q 2020 and Q 2019.

Table 7, Working capital ratio (Group A, Industry II and Group B, Industry II) shows that there is slight adverse variation in Industry II in region A compared to region B.

The result shows that the industries producing non-essential items such as automobile and textile goods face adverse effects on their business operational activities as well as their financial statements in region A.

Therefore, the company could not be able to maintain adequate working capital in comparison to Q 2020 and Q 2019.

Table 7
Group A & Group B, Industry II
Таблица 7
Группы А и В, отрасль II

	Group A, Industry II		Group B, Industry II		Group A, Industry II		Group B, Industry II		Group A, Industry II		Group B, Industry II	
Company	Current Ratio		Current Ratio		Acid Test (Quick) Ratio		Acid Test (Quick) Ratio		Working Capital Ra		Working Capital Ratio	
	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)	(Q1,'19)	(Q1,'20)
1	0.03	0.05	1.27	1.36	0.03	0.05	0.28	0.42	-0.65	-0.64	-0.58	0.07
2	1.37	1.29	1.28	1.57	1.10	1.04	0.87	1.10	0.14	0.12	-0.51	0.14
3	1.33	1.42	2.91	4.89	0.87	0.91	2.19	4.31	0.11	0.14	-0.71	0.19
4	1.65	1.76	1.42	1.55	1.53	1.64	0.53	0.63	0.16	0.17	-0.51	0.13
5	1.69	2.17	1.46	2.23	1.47	1.92	1.24	1.96	0.24	0.34	-0.58	0.22
6	1.55	1.32	1.27	0.97	1.02	0.88	0.28	-0.16	0.13	0.09	-0.67	-0.18
7	1.34	1.06	1.28	2.47	0.72	0.51	0.87	1.52	0.07	0.02	-0.86	0.11
8	1.63	1.61	2.91	5.74	0.79	0.84	2.19	4.69	0.13	0.13	-0.92	0.18
9	3.05	3.33	1.42	0.85	2.58	2.74	0.53	-0.92	0.28	0.29	-0.35	0.07
10	1.55	1.31	1.46	3.12	1.02	0.80	1.24	2.80	0.13	0.09	-1.21	0.10
11	0.03	0.04	1.27	1.53	0.03	0.04	0.28	0.61	-0.03	-0.04	-0.68	0.06
12	1.37	1.08	1.28	2.47	1.10	0.73	0.87	1.51	0.16	0.05	-0.89	0.10
13	1.33	0.93	2.91	7.13	0.87	-0.48	2.19	6.68	0.13	-0.04	-1.95	0.10
14	1.65	0.88	1.42	1.44	1.53	0.67	0.53	-0.49	0.00	0.00	-0.60	0.07
15	1.69	1.60	1.46	1.33	1.47	0.76	1.24	1.07	0.24	0.22	-0.62	0.03
16	1.55	1.19	1.27	1.43	1.02	0.69	0.28	0.41	0.13	0.06	-0.62	0.07
17	1.34	0.75	1.28	1.87	0.72	0.21	0.87	0.99	0.00	0.00	-0.65	0.11
18	1.19	1.09	2.91	4.06	0.58	1.01	2.19	1.81	0.22	0.78	-0.74	0.16
19	3.05	1.52	1.42	1.39	2.58	0.79	0.53	-0.12	0.25	0.32	-0.58	0.07
20	1.55	1.19	1.46	16.71	1.02	0.69	1.24	16.38	0.33	0.09	-6.22	0.12

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

Table 8
Group A & Group B, Industry II
Таблица 8
Группы А и В, отрасль II

	Group A, Industry II	Group B, Industry II
Company	Imapairement of Assets (Change % (Q1,'20)	Imapairement of Assets (Change Change % (Q1,'20)
1	10.0	-17.0
2	-15.5	-30.6
3	400.0	0.0
4	50.0	10.7
5	0.0	-2.0
6	7.3	-1.0
7	90.0	-60.8
8	-2.3	0.0
9	0.0	20.0
10	24.8	-2.0
11	76.0	30.0
12	661.7	-13.0
13	200.0	0.0
14	122.0	10.0
15	1.0	-2.0
16	8.5	70.0
17	11.1	13.1
18	-4.2	40.0
19	0.0	66.0
20	24.8	-1.0

Calculated by the author as per the data from Stock exchanges from Americas and stock exchanges from Europe.

Table 8, Impairment of assets (Group A, Industry II and Group B, Industry II) shows that there is a high increase in variation in Industry II in region A compared to region B.

The result shows that the majority of the industries producing non-essential items such as automobile and textile goods faced adverse effects on their business operational activities as well as their financial statements in region A. Therefore, the companies are facing impairment of assets at a higher rate in comparison to Q 2020 and Q 2019.

Unscientific and uncontrolled measures taken by external bodies (governments & WHO), adversely affect business operational activities and financial statements. Unscientific and uncontrolled measures taken by internal institutions (organizations), negatively affect business operational activities and financial statements. Therefore, H2 and H4 are supported. Thus, the findings revealed that during the pandemic as a phenomenon, the measures taken by external bodies (governments, World Health Organization (WHO)) and internal institutions (organizations) play a vital role in the degree of repercussion effect in economic and business operations and they will, in turn, affect organizational financial statements.

5. Conclusion

Based on the results of the research and discussion, it can be concluded that the measures taken by external bodies (governments, World Health Organization (WHO)) and internal institutions (organizations) play a vital role in the degree of repercussion

effect in economic and business operations and they will, in turn, affect organizational financial statements during the pandemic period.

Thus, this study has obtained unique findings as compared to previous studies. Furthermore, such a research in the field of pandemic effects on financial statements provides novelty in the world literature. This is thanks to the knowledge of the researchers; there was no empirical study that combined these variables and evaluated their empirical significance. The findings confirmed that there is a positive relationship between four hypothesis. Scientific and controlled measures taken by external bodies (governments and WHO), low adversely affected business operational activities (revenues, manufacturing/production, inventory, expenses) and financial statements (profitability, liquidity, impairment of assets, wealth and dissolution). Scientific and controlled measures taken by internal institutions (organizations) adversely affected business operational activities (revenues, manufacturing/production, inventory, expenses) and financial statements. Unscientific and uncontrolled measures taken by external bodies (governments and WHO) adversely affected business operational activities and financial statements (profitability, liquidity, impairment of assets, wealth and dissolution). Unscientific and uncontrolled measures taken by internal institutions (organizations) adversely affected business operational activities and financial statements towards business operational activities (revenues, manufacturing/production, inventory, expenses) and their financial statements (profitability, liquidity, impairment of assets, wealth and dissolution). The findings also suggest the role of governments and organizations for future prevention of 'Pandemic Effect on Financial Statements' that can be relied upon to fight with future pandemic situations.

In the future, even small and medium enterprises can also incorporate automated accounting software [Muneerali, 2020; Thottoli, 2020] to set aside a provision for such future pandemic contingencies. Information communication technology (ICT) enabled auditing to help professional auditors examine those statutory provisions on pandemic in any organization [Thottoli et al., 2019a; 2019b; 2019c; Thottoli, Thomas, 2020; Thottoli, 2021c; 2021d].

6. Significance of the study

This study is the first to suggest strengthening economic stability for a country during a pandemic era. Since pandemic is a universal disease which has already happened many times - smallpox, tuberculosis, plague, influenza pandemic, flu pandemic (H1N1), HIV/AIDS and current coronavirus pandemic. This pandemic impedes business operations and economic growth around the world as a universal phenomenon; governments and WHO are required to take well-organized scientific/controlled measures. This may help the government to keep statutory money reserve for coping with pandemic situations in the future. For example, the government keeps a certain budgeted amount for defense. Further, we can think of the various organizations to keep an adequate statutory reserve for facing such pandemic situation in the future, as well as this current study may assist the policymakers in various world organizations, ministry of health and governments, in particular, to implement wise and deliberate policies that can cope with a future pandemic situation.

7. Limitations and future research

The key goals established for this research were the identification of the factors that affect business operational activities during the pandemic period. However, this research has not touched upon the cultural aspects of each country that might be a barrier to implement strict governmental rules and policies. This study has considered four types of industries, moreover it can be applied for other types of industries too. Further research is necessary to extend and replicate this study to cultural and other spheres – geographical and economic environments to provide this wider support.

References

1. Adams J.G., Walls R.M. (2020). Supporting the health care workforce during the COVID-19 global epidemic. *Jama*, 323(15): 1439-1440.
2. Adrian R. (2019). Analysis of factors affecting the quality of financial statements regency apparatus work unit in the government of Aceh Tamiang Regency with organizational commitments as moderating variables. *International Journal of Public Budgeting, Accounting and Finance*, 2(3): 1-17.
3. Alabdullah T.T.Y., Ahmed E.R., Nor M.I. (2020). The world declining economy and coronavirus pandemic: Systems should be continued. *Russian Journal of Agricultural and Socio-Economic Sciences*, 102(6): 89-96.
4. Ali M., Puah C.H. (2019). The internal determinants of bank profitability and stability: An insight from banking sector of Pakistan. *Management Research Review*, 42(1): 49-67.
5. Amankwah-Amoah J., Khan Z., Wood G. (2021). COVID-19 and business failures: The paradoxes of experience, scale, and scope for theory and practice. *European Management Journal*, 39(2): 179-184.
6. Andriani H. (2020). Effectiveness of large-scale social restrictions (PSBB) toward the new normal era during COVID-19 outbreak: A mini policy review. *Journal of Indonesian Health Policy and Administration*, 5(2): 61-65.
7. Ani T.M., Odo A.M. (2019). Relationship between financial analysis and firms'value in food and drinks service industry in Nigeria. *IMT International Journal of the Arts and Sciences*, 3(1): 50-64.
8. Barro R.J., Ursúa J.F., Weng J. (2020). The coronavirus and the great influenza pandemic: Lessons from the "Spanish flu" for the coronavirus's potential effects on mortality and economic activity. *National Bureau of Economic Research*, w26866: 1-26.

9. Bateni L., Asghari F. (2020). Bankruptcy prediction using logit and genetic algorithm models: A comparative analysis. *Computational Economics*, 55(1): 335-348.
10. Bhardwaj R. (2020). Mitigating the adverse consequences of pandemics: A short note with a special reference to COVID-19. *SSRN 3565460.*
11. Birt J., Chalmers K., Maloney S., Brooks A., Oliver J., Bond D. (2020). *Accounting: Business reporting for decision making*. John Wiley & Sons.
12. Brammer S., Branicki L., Linnenluecke M.K. (2020). COVID-19, societalization, and the future of business in society. *Academy of Management Perspectives*, 34(4): 493-507.
13. Campbell J.L., Cecchini M., Cianci A.M., Ehinger A.C., Werner E.M. (2019). Tax-related mandatory risk factor disclosures, future profitability, and stock returns. *Review of Accounting Studies*, 24(1): 264-308.
14. Cantele S., Zardini A. (2018). Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability - financial performance relationship. *Journal of Cleaner Production*, 182: 166-176.
15. Chen C.W., Collins D.W., Kravet T.D., Mergenthaler R.D. (2018). Financial statement comparability and the efficiency of acquisition decisions. *Contemporary Accounting Research*, 35(1): 164-202.
16. Cirrincione L., Plescia F., Ledda C., Rapisarda V., Martorana D., Moldovan R.E., Cannizzaro E. (2020). COVID-19 pandemic: Prevention and protection measures to be adopted at the workplace. *Sustainability*, 12(9): 3603.
17. Crank M.C., Mascola J.R., Graham B.S. (2019). Preparing for the next influenza pandemic: The development of a universal influenza vaccine. *The Journal of Infectious Diseases*, 219(1): S107-S109.
18. Davern M., Gyles N., Hanlon D., Pinnuck M. (2019). Is financial reporting still useful? Australian evidence. *Abacus*, 55(1): 237-272.
19. Di Saverio S., Pata F., Gallo G., Carrano F., Scorza A., Sileri P., Smart N., Spinelli A., Pellino G. (2020). Coronavirus pandemic and colorectal surgery: Practical advice based on the Italian experience. *Colorectal Disease*, 22(6): 625-634.
20. Dinçer H., Yüksel S., Şenel S. (2018). Analyzing the global risks for the financial crisis after the great depression using comparative hybrid hesitant fuzzy decision-making models: Policy recommendations for sustainable economic growth. *Sustainability*, 10(9): 3126.
21. Gahlot A., Singhal R.K., Kendre R. (2019). A study on multi-variate financial statement analysis of Amazon and eBay. *NOLEGEIN - Journal of Financial Planning and Management*, 2(1): 11-24.
22. Hasanaj P., Kuqi B. (2019). Analysis of financial statements. *Humanities and Social Science Research*, 2(2): 17.
23. Henry E., Liu F.C., Yang S.Y., Zhu X. (2020). Does financial statement structural comparability affect analysts' forecasts? *Stevens Institute of Technology School of Business Research Paper*. URL: https://ssrn.com/abstract=3133324 or http://dx.doi.org/10.2139/ssrn.3133324.
24. Hosaka T. (2019). Bankruptcy prediction using imaged financial ratios and convolutional neural networks. *Expert Systems with Applications*, 117: 287-299.
25. Hu X., Yan H., Casey T., Wu C.H. (2021). Creating a safe haven during the crisis: How organizations can achieve deep compliance with COVID-19 safety measures in the hospitality industry. *International Journal of Hospitality Management*, 92: 102662.
26. Jatmiko B., Prawoto N., Astuti R.P., Sari R.N., Ardhi K.F. (2019). Application of government accounting standards, financial statements reporting, and accessibility of regional finance against accountability for regional financial management: Survey of all SKPDs of Kulon Progo Regency Government. In: *5th International Conference on Accounting and Finance 2019*, Atlantis Press, ICAF 2019.
27. Jayasekera R. (2018). Prediction of company failure: Past, present and promising directions for the future. *International Review of Financial Analysis*, 55: 196-208.
28. Kajüter P., Klassmann F., Nienhaus M. (2019). The effect of mandatory quarterly reporting on firm value. *The Accounting Review*, 94(3): 251-277.
29. Kamar W.A., Fatihah W.N. (2018). The impact of determinants liquidity risk towards profitability': A study on Millennium & Copthorne Hotels Plc in United Kingdom. *SSRN 3181649*.
30. Koonin L.M. (2020). Novel coronavirus disease (COVID-19) outbreak: Now is the time to refresh pandemic plans. *Journal of Business Continuity & Emergency Planning*, 13(4): 1-15.
31. Kruger H.M., Meaton J., Williams A. (2020). Pandemic continuity planning: Will coronavirus test local authority business continuity plans? A case study of a local authority in the north of England. *Emergency Management Review*, 4(1): 4-27.
32. Le H.H., Viviani J.L. (2018). Predicting bank failure: An improvement by implementing a machine-learning approach to classical financial ratios. *Research in International Business and Finance*, 44: 16-25.
33. Linares-Mustarós S., Coenders G., Vives-Mestres M. (2018). Financial performance and distress profiles. From classification according to financial ratios to compositional classification. *Advances in Accounting*, 40: 1-10.
34. Mao C.W., Wu W.C. (2019). Does the government-mandated adoption of international financial reporting standards reduce income tax revenue? *International Tax and Public Finance*, 26(1): 145-166.
35. Marjanović I., Stanković J.J., Popović Ž. (2018). Efficiency estimation of commercial banks based on financial performance: Input oriented DEA CRS/VRS models. *Economic Themes*, 56(2): 239-252.
36. Mathuva D.M., Tauringana V., Owino F.J.O. (2019). Corporate governance and the timeliness of audited financial statements: The case of Kenyan listed firms. *Journal of Accounting in Emerging Economies*, 9(4): 473-501.

37. Mazzarol T., Reboud S. (2020). Cash flow, profit and working capital. In: *Workbook for small business management*. Singapore, Springer, 117-125.
38. Muda I., Harahap A.H., Ginting S., Maksum A., Abubakar E. (2018). Factors of quality of financial report of local government in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 126(1): 012067.
39. Muneerali M.T. (2020). Impact of accounting software among SMEs accountants in Oman. *Financial Markets, Institutions and Risks*, 4(2): 25-33.
40. Müller O., Fay M., vom Brocke J. (2018). The effect of big data and analytics on firm performance: An econometric analysis considering industry characteristics. *Journal of Management Information Systems*, 35(2): 488-509.
41. Nainggolan R. (2018). Predictive ability of interim announcements by using mean deviation testi. *Jurakunman (Jurnal akuntansi dan manajemen)*, 2(2): 76-84.
42. O'Brien J. (2019). *Category management in purchasing: A strategic approach to maximize business profitability*. Kogan Page Publishers.
43. Olson D., Zoubi T.A. (2008). Using accounting ratios to distinguish between Islamic and conventional banks in the GCC region. *The International Journal of Accounting*, 43(1): 45-65.
44. Pelekh U., Khocha N., Holovchak H. (2020). Financial statements as a management tool. *Management Science Letters*, 10(1): 197-208.
45. Reichard C., Küchler-Stahn N. (2019) Performance budgeting in Germany, Austria and Switzerland. In: *Performance-based budgeting in the public sector*. Cham, Palgrave Macmillan, 101-124.
46. Robinson T.R. (2020). *International financial statement analysis*. John Wiley & Sons.
47. Routh T.B., McKnight M.A., Moore A.B. (2019). Disclosing tax consequences of a LIFO repeal: Considerations toward an ethical decision-making model based on potential convergence of IFRS & US GAAP. *Journal of Theoretical Accounting Research*, 14(2): 29-45.
48. Saleh R., Nakkash R., Harb A., El-Jardali F. (2020). K2P COVID-19 series: Prompting government action for tobacco control in Lebanon during COVID-19 pandemic. *Knowledge to Policy (K2P) Center*. Beirut, Lebanon, 19(1): 1-50.
49. Salma U., Hussain A. (2018). A comparative study on corporate diversification and firm performance across South Asian countries. *Journal of Accounting & Marketing*, 7: 1-7.
50. Tan W., Hao F., McIntyre R.S., Jiang L., Jiang X., Zhang L., Zhao X., Zou Y., Hu Y., Luo X., Zhang Z. (2020). Is returning to work during the COVID-19 pandemic stressful? A study on immediate mental health status and psychoneuroimmunity prevention measures of Chinese workforce. *Brain, Behavior, and Immunity,* 87: 84-92.
51. Thottoli M.M. (2021a). Impact of information communication technology competency among auditing professionals. *Accounting. Analysis. Auditing*, 8(2): 38-47.
52. Thottoli M.M. (2021b). Practical knowledge in preparing financial statements and ICT-enabled financial plans: An empirical study among entrepreneurial students in Oman. *International Entrepreneurship Review*, 7(1), 21-31.
53. Thottoli M.M. (2021c). Antecedent of lack of proficiency and the need for an automated financial plan for the course entrepreneurship creativity and innovation. *Journal of Ethics*, *Entrepreneurship and Technology*, ahead-of-print.
54. Thottoli M.M. (2021d). The relevance of compliance audit on companies' compliance with disclosure guidelines of financial statements. *Journal of Investment Compliance*, 22(2), 137-150.
55. Thottoli M.M. (2020). Knowledge and use of accounting software: Evidence from Oman. *Journal of Industry - University Collaboration*, ahead-of-print.
56. Thottoli M.M., Thomas K.V. (2021). The impact of web marketing on corporate social responsibility (CSR) and firms' performance. *Rajagiri Management Journal*, ahead-of-print.
57. Thottoli M.M., Thomas K.V. (2020). Characteristics of information communication technology and audit practices: Evidence from India. *VINE Journal of Information and Knowledge Management Systems*, ahead-of-print.
58. Thottoli M.M., Thomas K.V., Ahmed E.R. (2019a). Qualitative analysis on information communication technology and auditing practices of accounting professionals. *Journal of Information and Computational Science*, 9(9): 529-537.
59. Thottoli M.M., Thomas K.V., Ahmed E.R., (2019b). Adoption of audit software by audit firms: A qualitative study. *Journal of Information and Computational Science*, 9(9): 768-776.
60. Thottoli M.M., Thomas K.V., Ahmed E.R. (2019c). Examining the impact of information communication technology on auditing professionals: A quantitative study. *Journal of Advanced Research in Dynamical and Control Systems*, 11(12): 476-488.
61. Untaru E.N., Han H. (2021). Protective measures against COVID-19 and the business strategies of the retail enterprises: Differences in gender, age, education, and income among shoppers. *Journal of Retailing and Consumer Services*, 60: 102446.
62. Waqas H., Md-Rus R. (2018). Predicting financial distress: Applicability of O-score and logit model for Pakistani firms. *Business and Economic Horizons*, 14(1232-2019-760): 389-401.
63. Weetman P. (2019). *Financial and management accounting*. Pearson UK.
64. Williams C.C., Kayaoglu A. (2020). The coronavirus pandemic and Europe's undeclared economy: Impacts and a policy proposal. *The South East European Journal of Economics and Business*, 15(1): 80-92.
65. Wu Z., McGoogan J.M. (2020). Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: Summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. *Jama*, 323(13): 1239-1242.

66. Yosvid Y. (2020). The influence of operational income and load association, leverage, and firm size on earning management. *International Journal of Public Budgeting, Accounting and Finance*, 3(1): 178-190.
67. Zhang S., Diao M.Y., Duan L., Lin Z., Chen D. (2020). The novel coronavirus (SARS-CoV-2) infections in China: Prevention, control and challenges. *Intensive Care Medicine*, 46(4): 591-593.
68. Zhou X., Hong N., Ma Y., He J., Jiang H., Liu C., Long Y. (2020). Forecasting the worldwide spread of COVID-19 based on logistic model and SEIR model. *medrxiv*, 1-14.

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