The Effect Of COVID-19 Spread On Stock Markets: The Case Of Syria

Dr. Koussay Ammar *

(Received 17 / 8 / 2020. Accepted 9 / 6 / 2021)

□ ABSTRACT □

The study attempts to investigate the effects of the COVID-19 spread on the Syrian financial market (Damascus Securities Exchange). The study applied the Simple Regression Model to investigate the impact of the COVID-19 on the trading value of Damascus Securities Exchange during the period dated from 30th March to 28th July. The period of the study is 121 days, the researcher excluded holidays and the suspension of work in the Damascus Securities Exchange due to quarantine, therefore, the number of views decreased from (121) views to (54) views.

The study assumes the COVID-19 confirmed cases and death cases to be the independent variables, and the trading value of the Damascus Securities Exchange the dependent variable.

To achieve the objective of the study, the researcher used a hypothetical-deductive approach to formulate the hypotheses, then in order to test these hypotheses, the researcher used panel data (data time series).

The study findings revealed that there is a negative significant relationship between both of the confirmed cases and the death cases from COVID-19, and the trading value of Damascus Securities Exchange from 30th March 2020 to 28th July 2020.

Keywords: COVID-19, Trading Value, Damascus Securities Exchange.

_

^{*}Associate Professor, Faculty Of Administration Sciences, Al Sham Private University, Lattakia, Syria. Email:q.a.foas.LAT@aspu.edu.sy

تأثير انتشار فيروس كورونا المستجد COVID-19 على أسواق الأوراق المالية: دليل عملي من سورية

الدكتور قُصى على عمَّار *

(تاريخ الإيداع 17 / 8 / 2020. قُبل للنشر في 9 / 6 / 2021)

□ ملخّص □

تحاول الدراسة استكشاف تأثير انتشار فيروس كورونا المستجد (COVID-19) على السّوق المالية السّوريّة (سوق دمشق للأوراق المالية). حيث طبقت الدّراسة نموذج الانحدار البسيط لتحديد تأثير انتشار فيروس كورونا المستجد على قيمة التداول اليومية في سوق دمشق للأوراق المالية خلال الفترة من 30 آذار 2020 إلى 28 تموز 2020. بلغت مدة الدّراسة 121 يوماً، استبعد الباحث أيام العطل وأيام توقف العمل في سوق دمشق للأوراق المالية بسبب الحجر الصحي، وبالتالي انخفض عدد المشاهدات من (121) مشاهدة إلى (54) مشاهدة.

تفترض الدّراسة أن عدد حالات المصابين بفيروس كورونا المستجد، وعدد حالات الوفيات هي المتغيرات المستقلة، وأن قيمة التداول في سوق دمشق للأوراق المالية هي المتغير التابع.

ولتحقيق هدف الدراسة، اعتمد الباحث على المدخل الفرضي الاستنباطي لصياغة فرضيات البحث، ومن أجل اختبار هذه الفرضيات، اعتمد الباحث على تحليل الانحدار الخطى البسيط باستخدام نموذج السلسلة الزمنية.

أشارت نتائج الدراسة إلى أن هناك علاقة سلبية ذات دلالة إحصائية بين كلّ من عدد حالات المصابين بفيروس كورونا المستجد وعدد حالات الوفيات، وقيمة التداول اليومية في سوق دمشق للأوراق المالية خلال الفترة الممتدة من 30 آذار 2020 إلى 28 تموز 2020.

الكلمات المفتاحية: فيروس كورونا المستجد COVID-19، قيمة التداول اليومية، سوق دمشق للأوراق المالية.

_

^{*} أستاذ مساعد، كلية العلوم الادارية، جامعة الشام الخاصة (كليات اللاذقية)، سورية.

Introduction:

On 11th March 2020, the World Health Organization (WHO) officially declared the coronavirus (Corona Virus Disease 2019) (COVID-19) outbreak to be a global pandemic. As of 27th March 2020, the number of confirmed cases surpassed 500000, and it continues to rise (WHO, 2020). There are many diseases and epidemics that have occurred during the twenty-first century, such as: bird flu (N1H1), severe acute respiratory syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Ebola, until the COVID-19 appeared in 2019, which became a global pandemic and led to many economic and financial implications (Elsayed et Abd Elrhim, 2020).

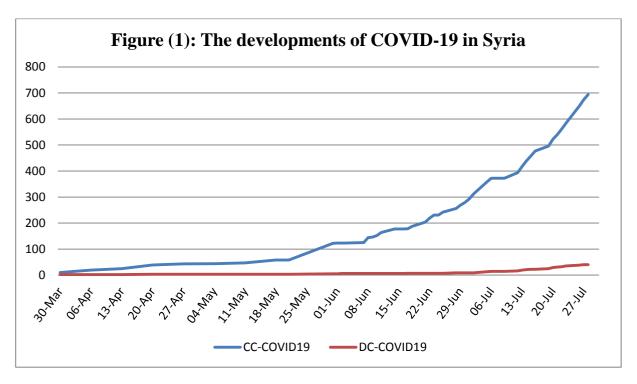
The outbreak of COVID-19 has already brought considerable human suffering and major economic disruption. This has implications for global supply chains, travel and commodity markets. Subsequent outbreaks in other economies have similar effects (The Organization for Economic Co-operation and Development, 2020). In fact, no previous infectious disease outbreak, including the Spanish Flu, has impacted the stock market as forcefully as the COVID-19 pandemic. In the United States, volatility levels in the middle of March 2020 rival or surpass those last seen in October 1987 and December 2008 and, before that, in late 1929 and the early 1930s (Baker *et al.*, 2020).

The outbreak of the new coronavirus has caused a pandemic of respiratory disease for which vaccines and targeted therapeutics for treatment are unavailable (Wang et al., 2020). The outbreak has caused major concerns about public health around the world. At the same time, there are growing concerns about the economic consequences as homes are required to stay home to slow the spread of the virus. The impact that "pausing the economy" may have on supply chains, households' demand, the financial stability of firms, and the financial sector. As a result, policymakers, businesses, and market participants try to estimate growth expectations for the years to come and assess the shape of the recovery (Gormsen et Koijen, 2020). The global financial crisis led to major collapses in 2008, but this collapse did not affect the whole world, unlike what we are living in now because of the COVID-19, as this led to the complete closure of many countries of the world and partially affected some countries (Sansa, 2020).

Generally, different monetary international organizations and platforms have alerted that the recent COVID-19 will have serious effects on the financial markets. In other words, the COVID-19 shock is severe even compared to the great financial crisis in 2008. Literature evidence revealed that the COVID-19 had a significant impact on the financial markets worldwide. Indicators of the impact of COVID-19 to the financial markets have been witnessed in different financial markets in the world. The results of a study of Daily Financial Times (Daily FT, 2020) indicated that the recent COVID-19 has impacted all financial markets worldwide in particular share prices trend dropped significantly and continuously. Among the financial markets experienced this situation is the Dow and S&P from the United states. supported the fact stating that, "The Dow Jones, and S&P both of which take into account the share prices of a variety of companies in the US have dropped by over 20%". Another world evidence of the impact of the financial markets worldwide is from Nikkei who trades with Tokyo Stock Exchange. Daily FT (2020) elaborated that, "Similarly, the Nikkei, which takes into account share prices of companies in the Tokyo Stock Exchange has also dropped significantly in the last few days".

However, the impact of the COVID-19 on the Arab financial markets has never been researched (El-Basuony, 2020). Therefore, the present study is undertaken to investigate

the impact of the COVID-19 on the financial market over the period till 30th March 2020 to 28th July 2020 in Syria.



Figures (1) illustrate the developments of Coronavirus spread during the study period, in Syria as follows: Source: Prepared by the researcher based on data from Syrian Ministry of Health (2020)

CC-COVID19 = Confirmed Cases of COVID-19 DC-COVID19 = Death Cases of COVID-19

The paper is arranged as follows: after this introduction, Section 2 reviews the research literature on economic and financial implications of COVID-19. Section 3 explains how to develop hypotheses and measure variables. Section 4 provides descriptive and diagnostic statistics. Section 5 is for experimental work, presenting results, and discussing how these results answer research questions by examining robustness. Section VI summarizes.

I. Literature Review:

This section provides a review of existing empirical evidence concerning the research topic, with illustration of effect of COVID-19 on financial markets:

Sansa (2020) investigated the impact of the COVID-19 on the financial markets from the period dated 1st March 2020 to 25th March 2020 in China and USA. The study applied a Simple regression model. The COVID-19 spread (independent variable) has been measured by the confirmed cases, while the financial market (dependent variable) has been measured by Shanghai Stock Exchange and New York Dow Jones. The study findings shows that there is a positive significant relationship between the COVID-19 confirmed cases and all the financial markets (Shanghai stock exchange and New York Dow Jones) during the study period.

The study conducted by Alber (2020) indicated attempts to investigate the effects of the COVID-19 spread on stock markets of 6 countries (United States, China, France,

Germany, Spain, and Italy), on daily basis over the period from 1st March 2020 till 10th April 2020. The COVID-19 spread has been measured by cumulative cases, new cases, cumulative deaths and new deaths, while stock market return is measured by changes in stock market index. Results indicate that stock market return seems to be sensitive to COVID-19 cases more than deaths, and to COVID-19 cumulative indicators more than new ones. Besides, robustness check confirms the negative effect of COVID-19 spread on stock market return for China, France, Germany and Spain. However, these effects haven't been confirmed for Italy and United States.

Additionally, **Qing** *et al.*, **(2020)** used conventional t-tests and nonparametric Mann–Whitney tests to analyze the direct and spill-over effects of COVID-19 on daily stock markets returns in China, Italy, South Korea, France, Spain, Germany, Japan and the USA over the period 1st June 2019 till 22th March 2020. They find that COVID-19 has a negative but short-term effect on stock markets returns in these countries. Also, they note that the spill-over effects of COVID-19 on stock markets is bidirectional between Asian countries and European and American countries. However, they report that there is no evidence this pandemic exert negative on stock markets of these states more than it does the global average.

The study of **El-Basuony** (2020) aimed to investigate the impact of the COVID-19 on the Arab financial markets. The study applied a the Simple regression model to investigate the impact of the COVID-19 on the financial markets of Egypt and Saudi Arabia (KSA) during the period dated from 1st April 2020 to 21th May 2020. The study used the Indicator (EGX-30) as a sample for Egyptian Stock Exchange and the Indicator (TASI) as a sample for the KSA Stock Exchange. The researchers assumes the COVID-19 confirmed cases and death cases to be the independent variables, and dependent variables is the trading volume for the Egyptian Stock Exchange and KSA Stock Exchange. The study findings revealed that there is a negative significant relationship between the confirmed cases and death cases from COVID-19, the trading volume on (Egyptian stock exchange and KSA stock exchange) during the period of study.

Elsayed et Abd-Elrhim (2020) aimed to verify the effect of COVID-19 spread on 17 sectors of stock exchange of Egypt over the period from 1st March 2020 till 10th May 2020. The dependent variable is measured by the returns of the daily sectorial indicators for the Egyptian stock market. COVID-19 measurements are constituted by cumulative cases, new cases, cumulative deaths, and new deaths. The study findings reveal that stock market's returns of all sectors seem to be more sensitive to cumulative death indicators than daily mortalities caused by COVID-19, and new cases more than COVID-19's cumulative cases.

Chaouachi et Chaouachi (2020) investigated the effect of COVID-19 pandemic on stock market in Saudi Arabia during the period from 2nd March 2020 till 20th May 2020, applying an Autoregressive Distributed Lag (ARDL) cointegration approach. The researchers analyzed the relationship between the natural logarithm of trading volume of Saudi stock market index (TASI) and the natural logarithm of daily COVID-19 confirmed cases both in the short-run and the long-run. The findings indicate that there is a negative impact of COVID-19 on stock market only in the long-run. Causality test reveals a unidirectional causality from COVID-19 prevalence's measure to stock market.

Al-Awadhi *et al.*, (2020) investigate the effect of the COVID-19 on Chinese stock market during the period dated from 10th January 2020 to 16th March 2020, through the method of panel data. Prevalence of COVID-19 was measured with the daily growth in total confirmed cases and the daily growth in total deaths caused by COVID-19. Results of their

estimation show that the decrease in both the daily growth in total confirmed cases and in total cases of death caused by COVID-19 involves the increase on stock returns across all companies.

Ben-Ayed *et al.*, (2020) examined the reaction of Tunisian stock market to current COVID-19 pandemic, over the period from 20th January to 20th April 2020, with an indicator of stock market presented by the stock returns performance of all companies listed on the Tunis Stock Exchange. The COVID-19 is measured by 3 variables: the daily growth of confirmed cases; the daily growth of death tolls; and the daily growth of recovered cases. The results conclude that daily growth of confirmed cases has a positive relationship with stock returns, while daily growth of deaths cases affect negatively the performance of stock returns. Conversely, daily growth of recovered cases has a positive impact but not significant.

While **Gormsen et Koijen** (2020) try to quantify how American and European investors' expectations about economic growth across horizons evolve in response to the COVID-19 outbreak and subsequent policy responses by using data from the aggregate equity market and dividend futures. Their expectations for annual growth in dividends have decreased by 28% in the United States and 22% in the European Union, while their expectations for GDP growth have decreased by 2.2% in the United States and 2.8% in the European Union.

Summarizing, the existing literature regarding the link between financial market and COVID-19 is quite limited. Thus, the current study contributes to the literature in 2 important ways:

- It contributes to the recently emerging evidence investigating the effect of more recent pandemic COVID-19 on Arab financial markets, which remains also limited.
- As far as we know, this is the first research looking to the reaction of the Syrian financial market (Damascus Securities Exchange) to the spread of COVID-19 over the period from 30th March 2020 to 28th July 2020.

Therefore, this paper tries to answer the following questions:

- **1.** Does the confirmed cases of COVID-19 affect the trading value on the Damascus Securities Exchange?
- **2.** Does the death cases of COVID-19 affect the trading value on the Damascus Securities Exchange?

II. Research Methodology:

The present study applied a Simple Regression Model to investigate the impact of the COVID-19 on the Syrian financial market during the period from 30th March 2020 to 28th July 2020. Time series data from Syria Covid-19 Statistics Data from 30th March 2020 to 28th July 2020 were employed by the study (Syrian Arab Republic - Ministry of Health) ¹.

The COVID-19 spread (the independent variable) has been measured by "Coronavirus cases" and "Coronavirus deaths" on daily basis. While the trading value for Damascus Securities Exchange is measured to be the dependent variable of the study.

Coronavirus spread couldn't be considered as "an event", as it has not a date of informational content, which could be used to determine the event window in terms of

_

¹ Syrian Arab Republic - Ministry of Health - Coronavirus Infection Cases: https://bit.ly/2TgJ7nc

event study methodology. Besides, the spread is still going on, and this is why, the event period is still unknown. So, stock market response to COVID-19 spread is measured by changes in the market indexes (Alber, 2020).

The study design is descriptive and analytical using the quantitative method with the application of Excel (Microsoft Office Excel 2013), (SPSS V.22).

The period of the study is 121 days, the researcher excluded holidays and the suspension of work in the Damascus Securities Exchange due to quarantine, therefore, the number of views decreased from (121) views to (54) views.

Developing Hypotheses:

To answer the research questions, the following hypotheses can be formulated:

- **1.** There's a significant relationship between the confirmed cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30th March 2020 to 28th July 2020.
- **2.** There's a significant relationship between the death cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30th March 2020 to 28th July 2020.

Measuring Variables:

The study employed the following equation to analyze the impact of the confirmed cases of COVID-19 on the trading value of the Damascus Securities Exchange:

VALUE-DWX_{it} =
$$\beta_o + \beta_I$$
 CC-COVID19_{it} + ϵ

Where:

- VALUE-DWX: the Dependent Variable, it is measured by the natural log of the trading value of Damascus Securities Exchange (Sansa, 2020).
- CC-COVID19: the Independent Variable, it is measured by the confirmed cases of COVID-19 during the period from 30^{th} March 2020 to 28^{th} July 2020 in Syria.
- β_o : is constant.
- β_1 : is the coefficient parameter.

Additionally, the study employed the following equation to analyze the impact of the death cases of COVID-19 on the trading value of the Damascus Securities Exchange:

VALUE-DWX_{it} = $\beta_o + \beta_I$ DC-COVID19_{it} + ϵ

Where:

- VALUE-DWX: the Dependent Variable, it is measured by the natural log of the trading value of Damascus Securities Exchange (Sansa, 2020).
- DC-COVID19: the Independent Variable, it is measured by the death cases of COVID-19 during the period from 30th March 2020 to 28th July 2020 in Syria.
- βo: is constant.

 $-\beta$ 1: is the coefficient parameter.

III. Descriptive Statistics:

Tables (1) illustrates descriptive statistics of the study variables, over the period from the 30th March 2020 to 28th July 2020 in Syria, as follows:

Table (1): Descriptive statistics

Variables	N	Range	Minimum	Maximum	Mean	Std. Deviation
VALUE-DWX	54	716101145.00	25922556.00	742023701.00	167650110.40	136622330.02
CC-COVID19	54	684	10	694	259.06	187.386
DC-COVID19	54	38	2	40	11.83	10.654

Source: Outputs of data processing using SPSS 22.

Descriptive statistics of the independent variable COVID-19 in Syria represented by confirmed cases (CC-COVID19) shows that the average is (259.06) cases, and the average of the deaths cases (DC-COVID19) is (11.83) cases, from 30th March 2020 to 28th July 2020, The value of the average trading value of the Damascus Securities Exchange (DWX) during the period is (167650110.40).

IV. Results and Discussion:

The present study applied the descriptive and analytical techniques to investigate the impact of the COVID-19 spread on the stock market from 30th March 2020 to 28th July 2020 in Syria.

1. The correlation between COVID-19 confirmed cases and the trading value of the Damascus Securities Exchange:

According to the table (2), the study regression results revealed that there is a significant negative correlation between the COVID-19 confirmed cases and the trading value in Damascus Securities Exchange from 30th March 2020 to 28th July 2020.

Table (2): Coefficients of Regression model between the COVID-19 confirmed cases and trading value of Damascus Securities Exchange

Variables	В	Std. Error	T	Sig.
(Constant)	8.271	0.083	99.208	0.000
CC-COVID19	- 0.001	0.000	- 2.913	0.005

Source: Outputs of data processing using SPSS 22.

The coefficient for the COVID-19 Confirmed cases is (-0.001) which means that for (1%) each additional for the COVID-19 Confirmed cases the trading value of Damascus Securities Exchange will drop for (0.1%) as well.

Table (3): Regression results between the COVID-19 confirmed cases and the trading value of Damascus Securities Exchange

Model Summary				
R	R R Square Adjusted R Square Std. Error of the Estimate			
0.375	0.140	0.124	0.35688	

Source: Outputs of data processing using SPSS 22.

Likewise, the independent variable, the confirmed cases of COVID-19, affects 12.4% (*Adjusted R Square*) in the dependent variable, trading value in the Damascus Securities Exchange (table 3).

In order to test the First Hypothesis, we formulate the alternative hypothesis:

 ${
m Ho_1}$: There's no significant relationship between the confirmed cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30^{th} March 2020 to 28^{th} July 2020.

The results of the table (4) show that the statistical significance of the regression model is significant, according to (F) test, where the value of the level of significance was less than (0.05), which indicates the significance of the model.

Table (4): Testing the significance of regression model between the COVID-19 confirmed cases and the trading value of Damascus Securities Exchange

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.081	1	1.081	8.486	0.005
Residual	6.623	52	0.127		
Total	7.704	53			

Source: Outputs of data processing using SPSS 22.

Therefore, we accept the First Hypothesis, which states that:

There's a significant relationship between the confirmed cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30th March 2020 to 28th July 2020.

The results are consistent with the findings reported by Alber (2020), El-Basuony (2020) and Chaouachi et Chaouachi (2020); whereas inconsistent with findings reported by Sansa (2020) and Elsayed et Abd-Elrhim (2020).

2. The correlation between COVID-19 death cases and the trading value of the Damascus Securities Exchange:

According to the table (5), the study regression results revealed that there is a significant negative correlation between the COVID-19 death cases and the trading value in Damascus Securities Exchange from 30th March 2020 to 28th July 2020.

The coefficient for the COVID-19 death cases is (-0.015) which means that for each (1%) additional for the COVID-19 death cases the trading value of Damascus Securities Exchange will drop for (1.5%) as well.

Table (5): Coefficients of Regression model between the COVID-19 death cases and trading value of Damascus Securities Exchange

Dumaseus Securities Exchange					
Variables	В	Std. Error	T	Sig.	
(Constant)	8.246	0.072	114.648	0.000	
DC-COVID19	- 0.015	0.005	- 3.201	0.002	

Source: Outputs of data processing using SPSS. 22.

Likewise, the independent variable, the death cases of COVID-19, affects 14.9% (Adjusted R

Square) in the dependent variable, trading value in Damascus Securities Exchange (table 6).

Table (6): Regression results between the COVID-19 death cases and the trading value of Damascus Securities Exchange

Model Summary				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
0.406	0.165	0.149	0.35180	

Source: Outputs of data processing using SPSS 22.

In order to test the Second Hypothesis, we formulate the alternative hypothesis:

Ho₁: There's no significant relationship between the death cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30th March 2020 to 28th July 2020.

The results of the table (7) show that the statistical significance of the regression model is significant, according to (F) test, where the value of the level of significance was less than (0.05), which indicates the significance of the model.

Table (7): Testing the significance of regression model between the COVID-19 death cases and the trading value of Damascus Securities Exchange

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.268	1	1.268	10.244	0.002
Residual	8.436	52	0.124		
Total	7.704	53			

Source: Outputs of data processing using SPSS. 22.

Therefore, we accept the Second Hypothesis, which states that:

There's a significant relationship between the death cases of COVID-19 and the trading value of Damascus Securities Exchange over the period from 30th March 2020 to 28th July 2020.

The results are consistent with the findings reported by Alber (2020) and El-Basuony (2020); whereas inconsistent with findings reported by Sansa (2020) and Elsayed et Abd-Elrhim (2020).

V. Conclusion:

This study is undertaken to investigate the impact of the COVID-19 on the Syrian financial market from the period dated 30th March 2020 to 28th July 2020.

From the existing literature this study will generate new knowledge regarding the impact of the COVID-19 on the financial markets. Most importantly the study will be very useful to the Financial applied economics major study and support investors and decision makers in the governments of Syria.

The study findings revealed that there is a negative significant relationship between both of the confirmed cases and the death cases of COVID-19, and the trading value on Damascus Securities Exchange from 30th March 2020 to 28th July 2020. That means the COVID-19 spread had a significant impact on the financial market from 30th March 2020 to 28th July 2020 in Syria.

The study sample considers only one financial market (Damascus Securities Exchange) with the short period of time from 30th March to 28th July 2020. It is the opportunity for further studies to accommodate big samples and for the long period for investigation.

References:

AL-AWADHI, A. M.; AL-SAIFI, K.; AL-AWADHI, A.; ALHAMADI, S. *Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns.* Journal of behavioral and experimental finance, Vol. 27, 2020, 1-5.

ALBER, N. *The Effect of Coronavirus Spread on Stock Markets: The Case of the Worst 6 Countries*. 2020, Available at SSRN: (SSRN Working Papers No. 3578080). https://ssrn.com/abstract=3578080.

BAKER, S. R.; BLOOM, N.; DAVIS, S. J.; KOST, K. J.; SAMMON, M. C.; VIRATYOSIN, T. *The unprecedented stock market impact of COVID-19*. National Bureau of Economic Research (NBER Working Papers No. 26945), 2020.

BEN-AYED, W.; MEDINI, F.; LAMOUCHI, R. *Stock Market under the Global Pandemic of COVID-19: Evidence from Tunisia*. 2020, Available at SSRN: (SSRN Working Papers No. 3598726). https://ssrn.com/abstract=3598726.

CHAOUACHI, M.; CHAOUACHI, S. *Current Covid-19 Impact on Saudi stock market: Evidence from an ARDL Model.* 2020, Available at SSRN: (SSRN Working Papers No. 3636333). https://ssrn.com/abstract=3636333.

DAILY FT. COVID - 19: The Economic Impact Simplified. Thursday, March, 2020.

EL-BASUONY, H. *Effect of COVID-19 on the Arab Financial Markets - Evidence from Egypt and KSA*. IOSR Journal of Business and Management, Vol. 6, N□. 22, 2020, 14-21.

ELSAYED, A.; ABD ELRHIM, M. *The Effect Of COVID-19 Spread On Egyptian Stock Market Sectors*. 2020, Available at SSRN: (SSRN Working Papers No. 3608734). https://ssrn.com/abstract=3608734.

GORMSEN, N. J.; KOIJEN, R. S. *Coronavirus: Impact on stock prices and growth expectations*. University of Chicago Booth School of Business. (NBER Working Paper No. 27387). 2020.

O. E. C. D. *The World Economy at Risk*. OECD Economic Outlook, Interim Report March. 2020.

QING, H.; JUNYI, L.; SIZHU, W.; JISHUANG, Y. *The impact of Covid-19 on stock markets*. Economic and political studies, DOI:10.1080/20954816.2020.1757570, 2020.

SANSA, N. The Impact of the COVID-19 on the Financial Markets: Evidence from China and USA. Electronic Research Journal of Social Sciences and Humanities, Vol. 2, Issue II, 2020, 29-39.

WANG, C.; LI, W.; DRABEK, D.; OKBA, N.; HAPEREN, R.; OSTERHAUS, A.; KUPPEVELD, F.; HAAGMANS, B.; GROSVELD, F.; BOSCH, B. J. *A human monoclonal antibody blocking SARS-CoV-2 infection*. Nature Communications, Vol. 11, $N\Box$. 1, 2020, 1-6.

ZHANG, D.; HU, M.; JI, Q. Financial markets under the global pandemic of COVID-19. Finance Research Letters, 2020, Available at: https://doi.org/10.1016/j.frl.2020.101528 WORLD HEALTH ORGANIZATION (WHO). Coronavirus disease (COVID-2019) situation report-67. 2020. https://www.who.int/emergencies/diseases/novel-coronavirus.

Appendix 1:

COVID - 19 Confirmed Cases and Deaths Cases for Syria from $30^{th}\ March\ 2020\ to\ 28^{th}\ July\ 2020$

DATE	Confirmed	Death
	Cases	Cases
30-Mar	10	2
31-Mar	10	2
01-Apr	10	2 2 2
02-Apr	16	2
03-Apr	16	2
04-Apr	16	2
05-Apr	19	2
06-Apr	19	2
07-Apr	19	2
08-Apr	19	2
09-Apr	19	2
10-Apr	19	2 2
11-Apr	25	2
12-Apr	25	2
13-Apr	25	2
14-Apr	29	2
15-Apr	33	2
16-Apr	33	2 2 2 2 2
17-Apr	38	2
18-Apr	38	2 2
19-Apr	39	3
20-Apr	39	3
21-Apr	42	3
22-Apr	42	3
23-Apr	42	3
24-Apr	42	3
25-Apr	42	3
26-Apr	43	3
27-Apr	43	3
28-Apr	43	3
29-Apr	43	3
30-Apr	43	3
01-May	44	3 3 3
01-May	44	3
02-May	44	3
	44	
04-May		3
05-May	44	3
06-May	45	3
07-May	45	3
08-May	47	3

09-May	47	3
10-May	47	3
11-May	47	3
12-May	47	3
13-May	48	3
14-May	48	3
15-May	50	3
16-May	51	3
17-May	58	3
18-May	58	3
19-May	58	3
20-May	58	3 3 3
21-May	58	3
22-May	59	4
23-May	70	4
24-May	86	4
25-May	106	4
26-May	121	4
27-May	121	4
28-May	122	4
29-May	122	4
30-May	122	4
31-May	122	5
01-Jun	123	5
02-Jun	123	6
03-Jun	123	6
04-Jun	124	6
05-Jun	124	6
06-Jun	125	6
07-Jun	125	6
08-Jun	144	6
09-Jun	146	6
10-Jun	152	6
11-Jun	164	6
12-Jun	164	6
13-Jun	170	6
14-Jun	177	6
15-Jun	177	6
16-Jun	177	6
17-Jun	178	7
18-Jun	187	7
19-Jun	187	7
20-Jun	198	7
20-Jun 21-Jun	204	7
21-Jun 22-Jun	219	7
		_
23-Jun	231	7

24-Jun	231	7
25-Jun	242	7
26-Jun	255	8
27-Jun	256	9
28-Jun	256	9
29-Jun	269	9
30-Jun	279	9
01-Jul	293	9
02-Jul	312	9
03-Jul	328	10
04-Jul	338	10
05-Jul	358	13
06-Jul	372	14
07-Jul	372	14
08-Jul	372	14
09-Jul	372	14
10-Jul	394	16
11-Jul	394	16
12-Jul	394	16
13-Jul	417	19
14-Jul	439	21
15-Jul	458	22
16-Jul	477	22
17-Jul	496	25
18-Jul	496	25
19-Jul	496	25
20-Jul	522	29
21-Jul	540	31
22-Jul	561	32
23-Jul	584	35
24-Jul	608	35
25-Jul	627	36
26-Jul	650	38
27-Jul	674	40
28-Jul	694	40

Source: Syrian Ministry of Health (2020)