### The Psychological Role of Covid-19 in the Trend towards the Digital Economy in Jordan

# <sup>1</sup>Dr. Amer Abdulkarim Ibrahim Al-Majali, <sup>2</sup>Dr. Mohammad Enaizan Al sharairi, <sup>3</sup>Dr. Heba Abdulkarim Ibrahim Al-Majali

Received: 18-April-2023 Revised: 12-May-2023 Accepted:30-June-2023

<sup>1</sup>Economic researcher /Ministry of industry trade and supply

<sup>2</sup>Associate prof. in Accounting department ,Amman Arab university

M.sharairi@aau.edu.jo

<sup>3</sup>Assoc.dr.Accounting department/ Mutah University

**Abstract**: The study aimed to find out the economic effects of the new coronavirus epidemic (COVID\_19) on the economic sectors, and the role of the coronavirus in the transition to the digital economy, and the study used the descriptive approach to describe the changing data during the period of the pandemic, and concluded that the coronavirus pandemic has a clear impact on the intensification of work in the digital economy. The study also showed the weaknesses in the infrastructure in Jordan to move to the digital economy, and the results showed a negative impact on the output of demand and supply in the economic sectors such as transport, trade, tourism and agriculture, but it positively affected the reduction of the trade balance deficit. The study recommended that the infrastructure of the digital economy should be taken care of in addition to providing awareness of the digital economy through schools, universities and training institutes, as well as supporting the renewable energy sector to reduce transport costs.

Keywords- Digital Economy, coronavirus, intensification

#### Introduction:

The world has known through time a series of imbalances that caused economic, political, social and even cultural problems, starting from the global recession in 1921 to the global financial crisis in 2008, during which time political and natural obstacles from wars and earthquakes affected the global economic system. After the world began to stabilize politically and economically in the second millennium through a series of trade and industrial agreements, the coronavirus epidemic came at the end of 2019 and faced a painful blow to the world economy, revealing the obvious fragility of international trade and some economic sectors such as industry, tourism and transport. The coronavirus pandemic has imposed travel restrictions on a large scale, and a host of global closures have been accompanied by volatility in financial markets and sharp declines in oil prices. In the short term, the economies of emerging markets and developing countries with weak health systems, high dependence on trade, tourism, remittances from expatriates, commodity exports, or financial vulnerabilities are likely to be the hardest hit. In the long run, severe recessions have lasting consequences for potential output by reducing investment and innovation, eroding the human capital of the unemployed, withdrawing from global trade, and disrupting supply chains. The long-term damage from the coronavirus epidemic will be severe in economies in financial crisis and in energy exporters due to the collapse in oil prices, so the world is relying on technology and information systems to solve some of the problems caused by the pandemic .

#### **Importance of the study :**

As a result of this, researchers and economists around the world are studying the role of the pandemic in the global economy. Researchers at the University of Sydney in Australia found that 147 million people worldwide lost their jobs, which caused salary payments to fall by \$2,1 trillion, and the global consumption level fell by 4,2%, equivalent to \$3,8 trillion, which is equivalent to the GDP of a country like Germany. AblaAbdullatif, Executive Director of the Arab Center for Economic Studies, in cooperation with Clements Presinger, a researcher in the Department of Development strategies of the International Institute for Strategic Policy Research, explained through their study tagged with (the economic impact of the new coronavirus epidemic on the tourism sector and financial transfers: Insights from Egypt) The closures that accompanied the coronavirus

wave significantly and clearly affected the GDP at the national level by 7%, equivalent to 41 billion Egyptian pounds, and affected the revenues of the Suez Canal by 10%, in addition to the decline of foreign remittances by 15%, which in turn caused the deterioration of household incomes The reason for the reduction in the volume of consumption, savings and investment, and the study of SalimJadai and HalaYahyaoui, characterized by the political and economic effects in light of the Corona pandemic, recommended the support of the renewable energy sector to revive the economy within the state and restructure public policies, In Jordan, researchers have been interested in studying the impact of this virus on the Jordanian economy and its role in digitizing the economy and exploiting technological progress in advancing the economy, which has stalled since the beginning of the pandemic. The Association of banks in Jordan expected a study on the impact of the coronavirus on the Jordanian economy to increase the current account deficit between (1,6-1,8) billion dinars, and expected the decrease of the reserves of the Central Bank between (11,6-14,6%), as the study showed that government revenues decreased 1,2 billion dinars, or 20%.

#### **Objectives of the study:**

The study seeks to identify:

- 1. The prominent role of the corona pandemic in the direction of the digital economy in the economic sectors in Jordan.
- 2. Knowledge of the impact of the corona virus on the variables of economic sectors in Jordan.

#### **Research methodology:**

The descriptive approach will be used to objectively describe the data and variables provided by the study, The data will also be obtained from the annual reports of the Central Bank of Jordan and bulletins of General Statistics.

#### The first requirement: The impact of the corona virus in Jordan.

#### First :Coronavirus(Covid-19).

The corona virus has been detected) Acute psychogenic syndrome (In China a year 2019 The World Health Organization classified this disease as a pandemic in 2020, The data showed that this virus spreads from person to person through close contact, It is also spread by respiratory droplets released from the cough of the infected ,In reference to the symptoms of this disease they vary from person to person but the most common symptoms are fever and cough, Fatigue, The heat, In addition to muscle pain, headaches and chest pain ,As a result of these rapidly spreading symptoms, the World Health Organization (who) has decided to quarantine the cities where this disease is detected, which has affected the movement of foreign and domestic trade, weak rates of World Tourism, in addition to the low level of GDP and high unemployment rates, and thus quarantine is an economic blockade on a number of countries around the world.

#### Second : Coronavirus indicators in Jordan.

Jordan, like all countries of the world, was affected by the emerging corona virus, which imposed its control in the Chinese city of Yuhan in December of the year 2019 This has seriously affected the current economic situation in the people's Republic of China and in the world as a whole ,And with the beginning of a year 2020 This virus began to spread widely and rapidly in all countries of the world, including Jordan, the first case appeared on the second of March of 2020 After that, the cases began to increase continuously, which caused a complete closure for three continuous months ,The Jordanian market was mainly dependent on the remaining stocks of food and consumer goods, especially since the defense law put forward by the prime minister dated 20 March of a year 2020 He came with orders, including the closure of land, sea and air borders during the first period of the embargo, which caused a crisis at the level of economic indicators ,After this closure, the epidemiological situation in Jordan improved to record zero infections in the history of 3/5/2020 For six consecutive days, the total number of injuries 461 Injury only from 84 A thousand tests ,Because Jordan is not isolated from the countries of the world, where there is no economic stability and self-sufficiency in basic and necessary commodities, which necessitated reducing protectionist measures, so it began to receive flights within the conditions of Public Safety and also began to receive basic goods) Food and consumer products (From the outside ,Which caused the virus to infiltrate into Jordan through these goods and with

drivers who did not comply with the mandatory quarantine ,This caused the spread of the virus in all regions of the Kingdom and began to invade from North to South; and this caused the acceleration of the frequency of infections, which led to the entry of the so-called second wave of the virus ,The highest number of injuries (7933) Injury to the 18/11/2020,Total casualties(163.920) A shoulder injury is only three months ,The high frequency of injuries continued until the end of the year 2020 The total number of injuries reached (294.494) Injury ,The number of deaths has also increased to (3834) Death ,The percentage of hospital occupancy 20%At the end of a year 2020 ,At the beginning of the year 2021 The death toll continued to rise, reaching the percentage of government hospitals %65 In January, the total number of injuries amounted to (326.855) Injury ,This necessitated the re-application of some preventive measures, which began with the closure of shops, restaurants and sports clubs, which caused financial hardship for the owners of these shops, forcing the Social Security Institution to offer support programs to stimulate the wheel of the economy and help it turn until the final cure for this pandemic appears.

At the beginning of February, the impact of the virus intensified in all governorates of the Kingdom, bringing the total infections at the end of the month to (391.090) Injury and (4701) Deaths as the occupancy rate of government hospitals reached 76% While the occupancy rate of private hospitals reached, 75% This obligated the government to activate the field hospitals that were previously established for this purpose and reduce the burden on government and private hospitals ,Then the world entered a wave of the spread of the mutated corona virus) Covid-20 (Which is considered more deadly than the previous version of the virus and affects the respiratory system significantly, which increased the number of daily deaths to reach 109 Death historyreferences22/3/2021 It is the highest death toll since the start of the pandemic ,According to the Daily reports of the Jordanian Ministry of Health contained in the form (1+2) The evolving virus caused a significant increase in the total infections to exceed the half-million barrier, reaching (633) Thousand injuries by occupancy rate 95% For private hospitals and85% In government hospitals.

#### The second requirement : The impact of the corona virus on economic sectors.

The corona pandemic has caused a severe economic shock to all countries of the world alike and Jordan is not immune from this shock ,Forecasts according to the World Bank report indicate that this shock will lead to a deep global recession in the long term ,According to the report, the Jordanian economy shrank by 3.5% General 2021 Compared to the expected contraction in the Middle East and North Africa by, 4.2% It is expected that this impact will affect a number of sectors, which we identify as follows:

#### First : The impact of covid-19 On the economic sectors:

• Industry and trade sector:

The corona pandemic has had a significant impact on the economic sectors in general, whether this impact is positive or negative, At the level of international trade in Jordan, the epidemic situation imposed restrictions on foreign trade represented by the closure of the land borders and the port of Aqaba, as this constituted an obstacle to international trade from and to Jordan, We note that national exports decreased by 1%To report 3.2 Billion dinars while total exports decreased by51%To become 7.7 The decrease in the gap between exports and imports led to a decrease in the percentage of the deficit in the trade balance by 22.7% During the first 8 Months of the year 2020 To reach its value 4.1 billion dinars, and the percentage of total export coverage of imports reached a percentage of 47.1%, The Jordanian economy, being a small-sized economy, depends on foreign trade, especially with the lack of diversity of its export base and the limited alternatives from local industries, we can only rely on imports to cover and meet local consumer demand for goods that we do not have the ability to manufacture locally, He stressed that it is important that we turn this unexpected pandemic into an opportunity to develop the local industry and diversify exports, especially in products and supplies with high global demand as a result of the spread of the epidemic globally, such as sterilizers, masks, gloves and medicines, and we have the required components in these economic sectors ,We must also take advantage of this pandemic to start paving the way towards self-sufficiency by working to support the agricultural sector, which we will talk about later.

As for the industrial sector, it is largely affected due to closures to avoid the outbreak of the epidemic ,Many industrialists are worried about the future of their industry after the decline in public consumption locally and abroad, which pushes them to re-adjust spending by reducing employment, as a percentage of 50% As a result of

the decrease in production capacity and the closure of production lines due to the limited supply of raw materials imported from China, China's exports of raw materials declined to 11.4% According to the statistics of the customs service, China's foreign trade has also declined to 6.4%.

The president of the chambers of industry of Jordan and Amman m .Fathi al-Jaghbir if" Assessing the impact of the coronavirus epidemic on the reality of the national industry is divided into two groups, the first sectors benefited from it and the second sectors were negatively affected and are struggling to survive, Industrial sectors such as clothing, knitwear, construction industries, furniture, furnishings, plastics and Dead Sea products are classified as the most negatively affected by the corona pandemic, while other industrial sectors such as food, sanitary and preventive supplies, pharmaceuticals and detergents are the most benefiting from the crisis due to the growing demand for their products locally and abroad, which stressed the trend of industrialists and traders to use technology and information systems to develop The process of e-marketing, e-commerce and activation of the so-called digital economy.

The national industry in Jordan currently contributes more than24% Of gross domestic product and employs approximately 230 A thousand workers, while industrial exports contribute more than90% Of the total national exports with a value of up to 4.3 One billion dinars per year ,One of the most important advantages of this crisis is that it contributed to introducing the Jordanian consumer to its national industry and its importance, as this industry has proven its ability to fit its production lines in proportion to the needs of citizens imposed by this pandemic, as well as its ability to provide the needs of citizens from basic industries such as food, medicine, detergents, etc, as there has been no shortage of any of these products in the local market.

#### • Transport sector:

The transport sector is one of the most important sectors that maintain food security in any country ,However, this sector was affected by the accelerated spread of the corona virus, The size of its impact was parallel to the impact of the industry and trade sector by the virus, The decline in the movement of exports and imports to and from Jordan has led to weakness in the transport sector in its various elements, whether land, air or sea transport, The covid-19 pandemic was imposed Unprecedented challenges for all companies operating in the transport sector, as the travel ban measures implemented to limit the spread of the virus led to the inability of companies to transport passengers between cities, countries and continents; as a result, there was a sharp decline in transportation revenues; the aviation sector recorded 700 Million dinars in a year 2020 Versus (1.293) One billion dinars in a year 2019 Which is equivalent to 1.6% From the gross domestic product, With a decrease of (593) Million dinars, As for road transport, it suffered as a result of measures to reduce the number of passengers to 50%, Since most of the owners of transport) Taxis and buses (Relying on bank loans, The number of taxis operating in the kingdom is estimated at about 16 A thousand cars, and 10 Thousands of vehicles and public transport buses according to the land transport regulatory authority, This decline has resulted in a wide range of challenges in the short and long term, starting with salary cuts and layoffs, as the number of employees in the road transport sector has reached(1850) Employee of origin 10 thousand employees, and the sector quickly began to recover during my year(2022-2023) As a result of the trend to use smart applications in buying and selling operations, which has moved the means of transportation and delivery, The widespread use of delivery from restaurants and service shops is also.

#### • Tourism sector:

The deterioration of the tourism sector at the beginning of the last decade in the Middle East and Jordan due to the events of the Arab Spring and the beginning of the war in Syria and Iraq ,After that, tourism began to return gradually and with intensive efforts from all state institutions, as Jordan was able to improve the growth of its tourism sector from a year ago 2016 To a year 2019, This growth has stimulated many private sector companies to invest in tourism exhibitions such as hotels and others ,As a result, the number of tourists arriving to the kingdom in January and February increased from 2020 An increase of up to12.2% And 15.9% Respectively compared to the same period of a year 2019 However, with the outbreak of the corona epidemic in March of 2020 The numbers have decreased by 51.2% Compared to the same period of a year 2019.

With solutions 19-March-2020 Defense orders have been issued and all sectors have been given appropriate support from Social Security and the banking sector to continue their sustainability and protect them from

bankruptcy ,However, the tourism sector did not receive this support, knowing that it is a very dangerous sector, which led to the collapse of a number of tourism companies and a decrease in tourist revenues, which amounted to 2.4 Billion dollars compared to 5.8 Billion dollars in a year 2019 ,As a result of the collapse of companies, a large number of workers in the tourism sector also lost their jobs, almost (23.535) Of origin (53.488) This is in proportion to46% Of the total employees in this sector, figure no (3) Shows the volume of revenues and the number of visitors to Jordan during the period from January to June.

And in general 2022 The tourism sector took advantage of the spread of the digital economy in the world by using smart applications to book hotels remotely, conduct flights and book them electronically in addition to booking restaurants and tourist attractions, which led to the gradual improvement of the tourism sector's situation and the continuation of its sustainability.

#### • Agriculture sector:

The agricultural sector is one of the most important sectors in countries and societies and constitutes the main source of income for a high percentage of the workforce, and it is assumed that it will be the main source of food and food security in any country 'The agricultural sector contributes to the GDP and has economic and social importance, it contributes to addressing the issues of poverty and unemployment and is one of the attractive sectors for women's work, as this sector is characterized by attracting women to work in agricultural production and other professions associated with it ,In Jordan, this sector has suffered from comprehensive prohibition measures at several levels, including:

- 1. Inability of farmers to reach their farms.
- 2. Large quantities of agricultural crops were damaged due to the continuation of the period of the comprehensive embargo.
- 3. The closure of borders to farmers, which caused a drop in prices and accumulated losses for them.

The production of agricultural crops is estimated at 7 One million tons of vegetables and fruits with a surplus of 32% According to the report of the Department of Statistics ,This caused damage to these crops and caused losses to farmers.

#### Second :The impact of covid-19 On GDP and unemployment rate:

The corona pandemic affected economic growth in Jordan only the IMF report for October of 2020 GDP is expected to decrease by 3.7% The inflation rate has also reached 2% Foreign investment has decreased by between 40% To 60%, Unemployment rates recorded their highest level historically during the year (2020-2021) Whether with unemployment rates between males and females, or between governorates and various specialties, considering that they are high rates by various criteria, where they have reached 25% At the end of a year 2020 With fears of puberty40% At the end of a year 2021 If the pandemic continues, The increase in this percentage came as a result of the closure in the economic sectors, including industry, agriculture, tourism and transport, which caused the dismissal of a large number of employees ,The Jordan Economic Forum revealed in its study on the high unemployment rates that the Jordanian market absorbs from(30-40) One thousand jobs per year for 100 A thousand job seekers per year, as it is considered a very large percentage in the economy of a developing country such as Jordan 250 Thousands of day laborers have been affected, Therefore, the trend towards the digital economy and the use of technology tools came to alleviate unemployment by creating jobs that did not exist before as electronic marketers and merchants in the information technology sector, as the delivery service did, and this led to reducing unemployment among young people, as the percentage of workers in the economic sectors transitioning to digitization reached 60% That is, that 60 The factor depends on the emarketing and e-commerce of each 100 A factor that depends on other sectors.

## The third requirement : The contribution of the corona pandemic to the trend towards the digital economy.

The Jordanian government has followed a number of measures to address the impact of the corona virus on economic enterprises, including the support provided by Social Security and postponing bank installments on enterprises so that they can pay their employees ' salaries and also individuals to be able to buy their needs and the economy wheel continues to rotate relatively.

But these measures were not enough to determine the impact of the crisis in all sectors, so the so-called digital economy appeared in the world, which calls for the adoption of modern and modern policies to increase exports in order to revive economic growth by working to reconsider the tax rates imposed on economic sectors and work to unify them and reduce the burdens, obligations and costs The private sector through reducing Social Security rates to reduce labor costs, reviewing energy and the instability of its prices, easing electricity prices, moving towards the use of clean energy and granting incentives and exemptions to support the export sector in the kingdom ,In addition to reducing fuel prices to reduce transportation costs.

The corona pandemic also contributed to the transition to the digital economy through the beginning of the enactment of special legislations, regulations and laws that will control the commercial process within the market, as the constant closures during the pandemic led to reliance on technology to fill the permanent need for goods and services through buying and selling, and the digital economy began during this stage through several steps:

- 1. Identifying the main direction of transformation of the digital economy, the transformation is not a change of course, but a total change on the economic systems of tax, customs and fees imposed on marketing, transport and trade companies ,So the direction must be determined first.
- 2. Determining the space for workers in this sector to study its impact on the unemployment rate, and the space for data and information.
- 3. Creating a sufficient infrastructure for the transition to the digital economy by providing special technologies for data transfer and transformation in Information Systems.
- 4. Paying attention to the digital industrial transformation by supporting industrial transformation projects for e-commerce and digital manufacturing through the use of machines that are more environmentally friendly and have high safety in the manufacturing process and lower cost.
- 5. Corona has also caused the Digital Tourism Transformation through electronic reservations for hotels and restaurants and thus the occupancy of a large number of these hotels.
- 6. Digital agricultural transformation through the use of modern agricultural technology that will develop the agricultural process, improve the quality of agricultural crops, as well as new and digital methods in the marketing of these products.

#### **Results:**

- 1. The corona pandemic affected the demand and supply outputs in the Jordanian economy and caused a decrease in exports by 5.1%.
- 2. The pandemic positively affected the trade balance deficit by decreasing by 22.7%.
- 3. The pandemic imposed restrictions on the transport sector by closing borders, which caused heavy losses to the aviation sector, as its losses amounted to (593) One million dinars in a year 2020, In addition to the ongoing losses of the road transport sector.
- 4. The pace of using modern technology in the economy is accelerating.
- 5. Failure to spread appropriate awareness of the practice of digital economy activities.
- 6. The lack of infrastructure for smart applications and the effectiveness of the digital economy.
- 7. Raising the contribution of the digital economy to reducing the unemployment problem during the crisis period.

#### **Recommendations:**

- 1. Spreading the necessary awareness through schools and universities about the concepts of the digital economy.
- 2. Attention to sufficient infrastructure for the application of Digital Economy programs.
- 3. Provide a trained and equipped workforce with knowledge of the digital economy.
- 4. Supporting the renewable energy sector to revive the economy and reduce transportation costs.
- 5. Using the digital economy in the green economy and reducing production costs.
- 6. Designing electronic applications in line with the target sector.

#### **References:**

- 1. Ahmed Fayez al Hirsh ,The great lockdown crisis the economic effects of the corona virus ,Journal of management and economics research ,Volume 02 Special issue ,2 ,2020, P- 119.
- 2. Ali al-Absi ,Hamza Tijani ,The repercussions of the corona covid virus 19 Socio-economic impacts and the most important measures taken to reduce the pandemic in Algeria ,Journal of economic and facilitation Sciences ,Volume 20 Special issue,30 September 2020.
- A. Y. A. B. Ahmad, S. S. Kumari, M. S, S. K. Guha, A. Gehlot and B. Pant, "Blockchain Implementation in Financial Sector and Cyber Security System," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, 2023, pp. 586-590, https://doi.org/10.1109/AISC56616.2023.10085045
- 4. Ahmad, A. Y. Baniahmad , (2019). Empirical Analysis on Accounting Information System Usage in Banking Sector in Jordan. Academy of Accounting and Financial Studies Journal, 23(5), 1-9.
- Ahmad YahyaBani Ahmad, Nawwaf Hamid Alfawaerah, Anas Al-Qudah, Mahmoud laham. The Governance Capability to Support Accounting & Financial Disclosure in the financial Statements (Case Study – Industrial Sector), Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.10, 2013
- Baniahmad , Ahmad A. Y.(2013). The Ability of Accounting Information Systems to support Profitability and Growth (Industrial Sector-Jordan Companies) European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.5, No.19, 2013
- Bani Atta, A. A., Ali Mustafa, J., Al-Qudah, S. S., Massad, E., &Ahmad, A. B. (2023). The effect of macroprudential regulation on banks' profitability during financial crises [Specialissue]. Corporate Governance and Organizational Behavior Review, 7(2), 245–258
- 8. Atta, A. A. B., & Marzuki, A. (2020). The Effect of Fund and Family Characteristics on Islamic Mutual Fund Flows Evidence from Saudi Arabia. *UlumIslamiyyah: Malaysian Journal of Islamic Sciences*
- 9. Khan, Yasser, et al. "Application of Internet of Things (IoT) in Sustainable Supply Chain Management." Sustainability 15.1 (2022): 694. https://doi.org/10.3390/su15010694
- 10. Shocking figures ,How the coronavirus affected the world economy English website sky news, 12-7-2020 .https://www.skynewsarabia.com/business/1360270.
- 11. Abdul Latif, Abla, Klimts, Presinger ", The economic impact of the coronavirus pandemic on the tourism sector and remittances :Insights from Egypt "https://www.ifpri.org/node/23036.
- 12. Salimjadai ,HalaYahyaoui ,An analytical study of the economic and political effects under the emerging corona virus) Covid-19 In Algeria -With an indication of the most important measures and actions taken ,Journal of political trends ,Fourteenth issue -March- 2021 -Arab Democratic Center.
- Salads ,Knight ,By the numbers ... The impact of Corona on the Jordanian economy ,Ammon News website, 18/4/2020, Jordan:

https://www.ammonnews.net/index.php?page=article&id=531263.

- 7. Reports of the Jordanian Ministry of Health ,https://www.moh.gov.jo./
- 8. Annual report ,Central Bank of Jordan ,2020 ,P-44.
- Tariq Al-Daja ,Corona crisis ..Industrial sectors are struggling for survival, others are recovering Al Ghad newspaper ,June 2020 ,https://alghad.com/%D8%A3%D8%B2%D9%85%D8%A9.
- 10. RahamZidane ,The transport sector is creaking under the weight of the continued curfew,7-April-2020, https://alghad.com/%D9%82%D8%B7%D8%A7%D8%B9%D8%A7%D9%84%D9%86%D9%82%D 9%84.
- 11. World Tourism Organization ,Deciding how countries can support tourism recovery ,Summary-Tourism and covid -19 The first version,7/2020.
- 12. Inhibiting aggression ,Al Ghad newspaper ,Farmers suffering from the corona pandemic,13 November,2020 ,https://alghad.com/%D9%88%D8%A7%D8%AF%D9%8A.
- 13. Jordan Strategy Forum ,2020 ,P12.