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# **Pandemic COVID-19 and Macroeconomic Indicators: A Study of the Structural Factors Exacerbating Palestine's Economic Crisis**

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*The sole author designed, analysed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

This paper explored and examined the impact of the (COVID-19) pandemic for the following period from March 2020 to February 2022 on selected macroeconomic indicators and variables in Palestine, as well as its economic impact and structural factors that exacerbate the coronavirus (COVID-19) pandemic issue, are examined in this paper. This study uses data from the Palestine Monetary Authority (PMA) and the World Bank to assess the link between the exchange rate, crude oil price, inflation, and economic growth in Palestine using Johansen-Juselius multivariate cointegration techniques. The findings show that a combination of falling oil prices, high inflation, exchange rate, and spillovers from the (COVID-19) pandemic outbreak triggered the economic downturn in Palestine, which not only reduced demand for oil products but also halted economic activity when social distancing policies were implemented. The government responded to the situation by assisting companies and a limited number of homes afflicted by the coronavirus (COVID-19) pandemic. As a result, the report recommends that the government invest inadequate digital infrastructure to ease the shift from face-to-face business operations to "digital or online" business activities, which can assist the digital economy to expand.

**Keywords:** *COVID-19 Pandemic; Macroeconomic Indicators; Economic Crisis; Johansen Co-Integration; Palestinian Economy; State of Palestine.*

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## 1. INTRODUCTION

In December 2019, the (WHO) World Health Organization received the reports of clusters of pneumonia patients with unclear origins in Wuhan, Hubei Province, China. Chinese officials later identified the causal agent as a unique Coronavirus strain (SARS-COV 2). The Director-General of the (WHO) designated the (COVID-19) outbreak a Public Health Emergency of International Concern (PHEIC) in January 2020, and described it as a pandemic on 11 March 2020, on the advice of the International Health Regulation Emergency Committee. The pandemic has been documented on every continent, with Egypt reporting the first case in Africa in February 2020. Over 52.9 million confirmed cases have been reported worldwide, with over 1.2 million fatalities.

(COVID-19) was quickly transported into Asia, which is a very sensitive continent. As of the time of writing this research, there have been 874,036 confirmed cases of (COVID-19) in Africa, with 524,557 recoveries and 18,498 deaths [1]. This equates to a recovery rate of 46.3 per cent and a death rate of roughly 4.3 per cent, respectively.

However, there has been much discussion over the causes of the low number of (COVID-19) cases reported in Asia [2,3,4] (World meter, 2020). Given the region's lack of public health infrastructure, government structure, permeable borders, and weak institutions, among other things, this appears paradoxical. It was stated that the low number of verified (COVID-19) cases in Asia and Africa was due to a lack of testing capability rather than geographic location [5-12].

Palestine is one of the 210 countries that have been affected worldwide. In March 2020, the first case was verified in Palestine. The index case was a 44-year-old Italian person who arrived at a health facility on February 26, 2020, after returning from Milan on February 24, 2020. After the index case was confirmed, 216 people were identified as potential contacts required to be followed up with. One of the remaining 188 contacts tested positive for (COVID-19) on March 9, 2020, while 48 people departed Palestine. In addition, the unique Coronavirus case fatality rate has been estimated by the (WHO) to be about 2% [13], significantly lower than the Middle East Respiratory Syndrome MERS (33%), and Severe Acute Respiratory Syndrome SARS (11%) (World meter, 2020).

The virus's incubation period can last as little as 2 days or as long as 14 days (World Health Organization (WHO): 2-10 days; China's National Health Commission (NHC): 2-14 days; United States Centers for Disease Control and Prevention (CDC): 10-14 days, during which the patient is contagious but shows no symptoms (asymptomatic transmission).

(COVID-19) may infect people of all ages, although the elderly and those with pre-existing medical disorders (such as asthma, diabetes, or heart disease) tend to be more susceptible to falling seriously ill as a result of the virus. Coronavirus illness is communicated mostly by coughing or sneezing with an infected individual. It can also spread when a person comes into contact with a virus-infected surface or object and then contacts their eyes, nose, or mouth [14-27].

Moreover, patients infected with (COVID-19) are the major sources of infection. Asymptomatic instances, on the other hand, should be given attention since they may play a crucial part in the transmission process.

The major transmission pathways are respiratory droplets and contact (World Health Organization, 2021). The primary transmission vector of (COVID-19) infection in children is close contact with symptomatic patients and asymptomatic people with prominent infection. (COVID-19) is a virus that affects people of all ages [28-40]. Severe instances are more likely to occur in the elderly and those with underlying chronic conditions [41]. So far, all pediatric cases of (COVID-19) infection that has been verified in the lab have been mild, and no deaths have been reported.

The incubation time for (COVID-19) infections varies between 1 and 14 days, according to (PMA), with the majority of cases occurring between 3 and 7 days. The majority of pediatric patients had intimate contact with infected persons or were family cluster cases, with the age of disease start ranging from 1.5 months to 17 years. Some individuals had stomach pains, nausea, vomiting, and abdominal pain, while others experienced a fever, dry cough, and exhaustion. Upper respiratory symptoms included nasal congestion and a runny nose, while gastrointestinal symptoms included stomach pain, nausea, vomiting, and abdominal pain [42-54].

The majority of infected youngsters show just minor clinical symptoms. They have no fever or pneumonia symptoms and have an excellent prognosis. The majority of them recover within 1–2 weeks after the commencement of the condition. Few people will develop lower respiratory infections. There have been no positive infants delivered by (COVID-19) infected women, and no neonatal cases have been recorded [55-64]. Clinical symptoms in pediatric patients should be further characterized after collecting additional pediatric case data, it should be underlined. Furthermore, as pathogen analysis becomes more widely used, the number of confirmed infected patients will rise.

Furthermore, adult studies demonstrate that serious patients typically experience dyspnea one week after the onset of the disease. Acute Respiratory Distress Syndrome (ARDS), septic shock, refractory metabolic acidosis, and coagulation failure are all possible outcomes in severe cases. Even if there have been no confirmed infant fatalities, the potential of death should be acknowledged. Even though clinical indications in juvenile patients are frequently milder than in adult patients, ARDS and fatality cases occurred in infected children during the (SARS) and (MERS) pandemics [65-73].

To distinguish between influenza virus, parainfluenza virus, adenovirus, respiratory syncytial virus, rhinovirus, and other viruses, as well as Mycoplasma pneumonia, chlamydia pneumonia, and bacterial pneumonia, as well as human metapneumovirus, (SARS) coronavirus, and other viruses, a differential diagnosis should be performed. When diagnosing (COVID-19) infection, other viruses and/or bacteria should be explored.

Beyond the public health repercussions of regional or global outbreaks of emerging and endemic infectious diseases, bigger socioeconomic ramifications are often disregarded in risk and impact assessments. Infectious diseases that are endemic set in motion a complex chain of events in the economy. They are rare and catastrophic events with a wide range of features and volatility across time and across countries. Several factors influence terrorism risk, which vary based on the sort of activity [174-86].

The idiosyncratic nature of endemic infectious diseases is influenced by a number of factors, including the magnitude and duration of the

event, the size and state of the local economy, the geographic areas affected, population density, and the time of day the event occurred. Chronically ill cattle are supplied prematurely at a discount if the costs of mortality loss are acceptable, and care is clearly traceable. Estimating indirect costs, such as reduced local labour productivity and/or the impact on international travel and trade, can be challenging [87-91].

Given the aforementioned, investigating the influence of (COVID-19) on Palestine's economic growth will be hard for a single researcher. As a result, we concentrated our research on a few macroeconomic issues. The price of crude oil, the exchange rate, and inflation are all factors. It also considers the structural problems that have worsened Palestine's economic situation as a result of the (COVID-19) outbreak. It looks at healthcare infrastructure, the digital economy, and social welfare, among other things.

## 2. LITERATURE REVIEWS

This section gives a summary of the (COVID-19) pandemic in Palestine, accounting for changes in the currency rate, crude oil price, and inflation rate. Furthermore, structural concerns that worsen economic crises are explored, as well as mitigation techniques.

### 2.1 Review of the COVID-19 Pandemic in Palestine

The Palestinian economy appears to have entered instability when (COVID-19) debuted in Palestine on February 27, 2020 [13]. (COVID-19) was designated a worldwide pandemic by the World Health Organization (WHO) thirteen days after its introduction from Italy, on March 11. As the virus continues to spread on an unimaginable scale both internationally and locally, official responses appear to be focused primarily on limiting the virus's spread within the country through social isolation policies such as closing educational institutions, limiting work and restricting people's movement, providing palliatives to the "vulnerable and poorest of the poor," imposition of nighttime curfews [92-97].

"Many observers believe that measuring the degree and breadth of the pandemic's impact on the nation's social and economic life will be difficult, if not impossible until the situation returns to normal as long as the virus continues to spread" (Dingl & Neiman, 2020). But what will

the pandemic's conclusion be? What are the long-term implications? This uncertainty is widespread, and it has caused concern among the general public, academics, and politicians. Despite the mystery surrounding the disease's genesis, numerous lines of research have emerged to investigate the disease's macroeconomic impact at the global, continental, and national levels as the pandemic continues [98-110].

Ochia, C., [111] a follow-up to (Onyekwena, C., & E. Amara Mma, 2020) examine seven alternative scenarios for how (COVID-19) could change in the next year. The disease's course and economic consequences are largely unknown, according to the report, making it difficult for policymakers to create suitable macroeconomic policy responses.

The study's scenarios reveal that, despite the outbreak's containment, the impact on the world economy would be severe in the near term, as shown by [112-117]. Furthermore, the economic impact of the (COVID-19) situation is examined across industries and nations.

According to the analysis, the sample of 30 countries surveyed would have a median GDP decline of -3.6 per cent in 2020. The analysis estimates that GDP will decrease by more than 15% in some scenarios, and by more than 22% in some countries. Coronavirus might cost the global economy \$2.7 trillion, according to (Orlik et al, 2020). "In a baseline worldwide pandemic scenario, GDP declines by 2% below the global norm, 3.5 per cent for developing countries, and 1.8 per cent for wealthy countries" [118].

"In what appears to be a veiled criticism of the public media and academic studies for concentrating solely on the (COVID-19) pandemic's global socioeconomic impact. Furthermore, it is only one part of the entire picture of economic consequence, according to the report" [119].

Given the continent's high sickness burden, poorly built infrastructure and safety nets, and weak health systems, the pandemic's impact is expected to be severe throughout Asia and the Middle East. Following the same rationale, officials should conduct a country-level impact analysis, which is not just desirable but also required. The pandemic's expected deteriorating

impact on the Palestinian economy is inescapable for a variety of reasons.

To begin with the economy has yet to fully recover from the 2016 recession's consequences. Second, the economy is highly reliant on crude oil, whose worldwide price has decreased drastically. Finally, foreign exchange reserves were lowered from \$45.1 billion in December 2019 to \$35.3 billion in March 2020. Fourth, the country's debt burden has been rising since 2015. Fifth, inflation remains high, putting downward pressure on the Shekel.

Finally, the healthcare system's capability is dismal. For these and other reasons, Palestinians are concerned about the impact (COVID-19) will have on their economy. According to [120,121], a combination of plummeting oil prices and other causes, as well as spillovers from the (COVID-19) pandemic, caused Palestine's economic collapse.

## **2.2 Selected Macroeconomic Fundamentals and the COVID-19 Pandemic**

According to [116,120,121], "adopting certain strict laws to prevent the spread of the coronavirus may have some benefits; but it also places restrictions on many aspects of a country's existence, notably its economic activities". "The performance of the economy's macroeconomic fundamentals, such as economic growth, general price level (consumer price index or inflation), an exchange rate (strength of local currency), interest (bank lending) rate, private investments, employment, and stocks and global oil prices, among others, could be used to measure other impacts" [122].

Because the (COVID-19) pandemic was not incorporated into the budgeting process, these economic losses might impair total economic activity (MoNE, 2020). As a result, in order to evaluate the effect on the Palestinian economy via the (COVID-19) and these fundamentals, it is necessary to investigate the historical trajectory of some of these factors since the WHO announced the pandemic. This section discusses global crude oil prices, foreign currency rates, the all-share index, and inflation.

## **2.3 Cases of COVID-19 and the Exchange Rate**

According to [122], Palestine's currency rate regime has been a controlled float for many

years, with official prices established by the top monetary authority rather than market forces of demand and supply. The substantial existence of the parallel market (sometimes referred to as the noisy 3%) in the Palestinian foreign currency market is one of the market's most distinguishing features, as it dominates the official rates while diminishing the apex monetary authority's influence over the market rates. In this sense, while there is normally an official rate (often fixed at a value for a lengthy period), many foreign currency traders and their clients rely heavily on parallel market prices. Speculations, which might include remarks made by the central bank regarding the official rate, generally drive the latter (PMA, 2021).

Most businesspeople, on the other hand, would rather deal with parallel market dealers than with established banks because of the massive paperwork involved (PMA, 2022). As a result, (COVID-19) and the parallel market-determined exchange rate changed in lockstep. The exchange rate appears to depreciate as the number of validated (COVID-19) incidents climb, with progressively unexpected variations as the number of confirmed cases grows. Market assumptions about the dollar's alternating surplus and deficit might be to blame [123-134].

Furthermore, (PMA, 2021) predicted that the Shekel's value would plummet as the pandemic progressed, requiring the (PMA) to choose between preserving the status quo by keeping the official rate fixed or seeking to diminish the premium obtained by parallel market dealers. The former would need the (PMA) to pump more dollars into the market, which may be costly given that the country's major source of foreign income – crude oil – is already in decline.

Closing the premium, on the other hand, would cause the Shekel to depreciate even more. While maintaining the status quo throughout the pandemic might be costly and unaffordable, devaluation is more likely and could result in an increase in overall price levels (PMA, 2022).

The (PMA) chose the latter, causing the Shekel to depreciate, resulting in a rise in total prices, with the inflation rate jumping from 11.62 per cent in December 2019 to 16.12 per cent in January, 12.2 per cent in February, and 14.22 per cent in March 2020 [122]. Foreign inflation enters Palestine directly through the currency rate. When the inflation rate of the country's trade partners migrates into the country, the Shekel value of imported products will rise,

resulting in higher domestic pricing of imported commodities. As a result, inflationary pressures may arise as a result of the pandemic.

## 2.4 Cases of COVID-19 and the Price of Crude Oil

The analysis of global oil prices is based on two key points: first, as of January 2020, Palestine was the world's 26th largest crude oil importer and the largest in the Middle East; second, Palestine's over-reliance on oil is concerning, with oil revenue accounting for more than 90% of the country's foreign exchange earnings. As a result, variations in global oil prices are projected to have a significant impact on the country's revenue and, more significantly, economic activity (MoNE, 2020).

In addition, these shocks might be connected to global oil supply events, such as the global oil collapse that happened from 2016 to 2018 as a result of the shale oil revolution, pushing crude oil prices below \$100 per barrel. Global oil prices have remained steady between 33.26 and 77.41 USD/barrel for the past four years prior to the (COVID-19) pandemic. The oil price trend in relation to the (COVID-19) confirmed occurrences [135-143].

Following the World Health Organization's declaration of (COVID-19) as a pandemic, global oil prices plummeted, owing to an alarming increase in the number of confirmed (COVID-19) cases and the rate of spread across nations, crippling economic activity (partially or completely) in afflicted countries. Given that the majority of countries around the world, including those that produce oil, have already been decimated by the pandemic, and trade has been harmed as a result of an excess supply of global crude oil and a lack of storage capacity, as well as an excess supply of global crude oil without a comparable demand, with some global crude oil prices plummeting into negative territory, the slide has reached an all-time low.

Moreover, given Palestine's reliance on crude oil exports, volatile global oil prices have a significant influence on the country's overall price level, foreign exchange revenues, and gross domestic product (GDP). However, increased volatility is expected during a pandemic. Because crude oil accounts for a significant portion of the country's foreign earnings as well as federal government revenue, the worldwide oil price reduction produced by the oil price shock (in this

case, the declaration of (COVID-19) as a pandemic) may imperil economic productivity.

As a result, the rise in (COVID-19) cases are expected to have a negative impact on economic development, owing to rising oil prices and government revenue.

This is exacerbated by the suspension of various economic operations. Given that Palestine is a small, open economy that is primarily dependent on imports (MoNE, 2020), there may be some form of imported inflation on the total price level. While there are concerns that the outbreak would quickly plunge the country into recession, ordinary price levels will also be affected.

## **2.5 Inflation and COVID-19 Pandemic Cases**

As a result of the (COVID-19) impacts, Palestine's inflation rate has risen to 16.77 per cent. Palestine's inflation rate grew by 16.81 per cent (year-on-year) in April 2020, according to data from the Palestinian Central Bureau of Statistics (PCBS). This is 0.06 per cent higher than the March 2020 rate of 16.33 per cent, and it is the largest increase since April 2018. As the country grapples with the economic crisis brought on by the (COVID-19) pandemic, Palestine's inflation rate has risen to its highest level in 24 months.

According to the Palestinian Central Bureau of Statistics (PCBS) latest (CPI) data, the inflation rate jumped to 16.71 per cent (year-on-year) in April 2020 from 16.33 per cent in March 2020. The index climbed by 1.02 per cent month over month in April 2020, 0.12 per cent more than the 0.48 per cent reported in March 2020.

### **2.5.1 Food Inflation**

The composite food index increased by 0.07 points to 11.06 per cent in April 2020, up from 12.66 per cent in March 2020. The closely watched component of the inflation index increased by 1.18 per cent month over month in April 2020, up 0.18 per cent points from the 0.76 per cent reported in March 2020. According to the study, price increases in potatoes, yams, and other tubers, fish, oils and fats, meat, fruits, bread and cereals, and vegetables contributed to the increase in the food index.

### **2.5.2 Core Inflation**

Core inflation (all items excluding farm produce), which excludes the expenses of volatile

agricultural produce, was 7.66 per cent in April 2020, up 0.21 per cent from 7.53 per cent in March 2020, according to (Adenomon and Maijamaa, 2020). In April 2020, the core sub-index increased by 0.58 per cent month over month, compared to 0.4 per cent the prior month.

Bicycles, passenger transportation by road, passenger transportation by sea and inland waterways, paramedical services, Hospital services, pharmaceutical products, Medical services, Motorcycles, and major household appliances, whether electronic or not, all saw the largest price increases, according to the report.

### **2.5.3 Palestine's Hardest Hit and COVID-19 Pandemic**

The highest year-on-year inflation rate was 10.22 per cent in Palestine, followed by 10.11 per cent in Jerusalem and 9.77 per cent in Ramallah [122]. Meanwhile, the lowest inflation rate rises were in Jerusalem (6.76%), Ramallah (8.5%), and Hebron (8.49%). Nablus also had the highest year-on-year food inflation rate, at 13.37 per cent. Bethlehem, on the other hand, had the least rise, at 10.67 per cent, followed by Jenin at 8.7% and Bethlehem at 11.26 per cent.

According to the most current inflation report, the economy's lockdown in response to the (COVID-19) pandemic, as well as the ongoing global oil crisis, has resulted in a dramatic increase in the cost of general goods and services [122] (MoNE, 2020).

It's worth mentioning that the most recent increase in the inflation rate shows that consumers' purchasing power has deteriorated. That is, despite low investment rates and nearly flat economic activity, consumers' ability to buy the same number of goods with the same level of income has worsened over time.

## **2.6 COVID-19 Pandemic and the Budget for 2020**

It comprises the government's 2020 budget assumptions and estimates prior to the (COVID-19) outbreak, as well as any modifications made to reflect the present economic circumstances (PMA, 2020; MoNE, 2020). This is to see how skewed budget assumptions and estimates were as a result of the (COVID-19) pandemic. Because important macroeconomic parameters employed in the budgeting process are greatly

exaggerated, the (COVID-19) pandemic has had a negative influence on the budget.

Despite the government's downward revision of budget forecasts in reaction to reality [122], the statistics during the (COVID-19) outbreak in the first quarter of 2020 were much lower. Oil output and price plummeted by around 8.26% and 57.73%, respectively; the exchange rate fell by about 14.07%; inflation rose to over 10.4%; and GDP grew by 1.75 per cent, far less than predicted.

Overestimation of important elements, including oil output, price, and currency rate, resulted in a 42% revenue shortfall due to a 62% decline in oil income, as well as a 111% increase in the budget deficit. Borrowing would be required to fund around 43.66 per cent of the planned budget, adding to the country's already high debt burden.

Furthermore, because the world market is already overburdened by an unmet demand for extra crude oil, the oil price decline is projected to endure for some time, at least until the (COVID-19) outbreak is finished and normalcy is restored. According to [122] (MoNE,2020), this would have an impact not only on the country's foreign reserves, as crude oil accounts for the majority of foreign earnings, but also on the purchasing power of the local currency, as further devaluations are likely if the apex monetary authority is unable to maintain the current exchange rate.

In addition, more external borrowing appears inevitable, given the Palestinian government's decision to borrow approximately \$3.5 billion from multilateral agencies such as the International Monetary Fund (IMF), the World Bank, and the Palestinian Monetary Authority (PMA), while also maintaining the concession agreement with these agencies and sectoral banks in Palestine [122] (MoNE, 2020).

Moreover, under the Quick Financing Instrument (RFI), the IMF has already granted US\$2.6 billion in immediate financial assistance to assist the government in dealing with the severe economic implications of the (COVID-19) shock and the rapid decline in oil prices. A World Bank loan of US\$1.8 billion, a PMA loan of US\$1 billion, and an undisclosed figure from the Islamic Development Bank are still being considered. In light of this financial uncertainty, the next section

attempts to forecast Palestinian economic development for 2020.

## **2.7 Factors that Exacerbate the Economic Crisis**

The economic, social, and organizational environment that supports an economy's growth and development are referred to like structural elements. Health infrastructure, the digital economy, and welfare programs are examples of structural factors.

### **2.7.1 Poor Public Health Infrastructure**

According to a 2020 BMI research [120,121], Palestine had an estimated 21,206 general hospitals in 2019, including 2,631 in the public sector. There were around 6,000 private health facilities and 112,000 hospital beds in 2019, corresponding to 0.6 per thousand persons, which is lower than the Asian average. Palestinian public health infrastructure is weak, with limited ambulance services, inefficient national health insurance systems, and insufficient primary health care facilities, all of which have been connected to the country's high maternal and newborn death rates [122].

Similarly, [120,121] said that Palestine's healthcare system was two-tiered, with a large government sector and a smaller commercial sector. In comparison to wealthier countries, Palestine's private healthcare business is small and fragmented due to minimal support for private health insurance. Furthermore, out-of-pocket spending continues to account for half of all healthcare spending in Palestine, meaning that the majority of Palestinians either do not trust or rely on the country's health insurance system or are unaware of its existence. Despite the fact that the National Health Insurance Scheme (NHIS) was established in 2004, just 3% of the population was insured in 2019.

Furthermore, the Palestinian pharmaceutical industry faces its own set of problems. With a market share of over 40% in East Asia, the Palestinian pharmaceutical sector is one of the largest in the Middle East [120,121]. However, the vast majority of active pharmaceutical ingredients (API) used in Palestine are imported from China, and just 8% of medicines are manufactured there. Inadequate infrastructure and unreliable utilities, a scarcity of skilled workers, limited access to capital, a lack of appropriate government incentives, government

policy incoherence, low demand due to fierce competition from Asian companies, particularly China, and high cost of doing business due to imported and expensive production inputs, and regulatory issues, to name a few, plague the industry.

“In addition, Palestine's drug sector is largely unregulated (MoNE, 2020) because health officials have difficulty stopping the introduction of illegal medications and locating informal drug sellers who operate without a registered license. Informal drug dealers are thought to account for more than half of the country's pharmaceutical industry, and they exploit unofficial channels to import substandard and counterfeit drugs”. “In comparison to public facilities, private institutions generated 52% of low-quality medications, according to studies, and the bulk of these commercial facilities are uncontrolled. The unregulated Palestinian pharmaceutical business is a major factor to the country's low-quality pharmaceutical distribution” [120,121].

According to [120,121], “the breakdown of Palestine's public health infrastructure rendered it difficult for Palestine to handle the fast-spreading (COVID-19) sickness during the pandemic. Local drug manufacturers were unable to produce drugs that could temporarily suppress coronavirus in infected patients because the APIs used to manufacture suppressant drugs could no longer be imported because China had shut down its factories and closed its borders to control the coronavirus pandemic that was ravaging the country at the time. Furthermore, numerous nations lacked isolation centres, including Ramallah and other places. The number of infected patients in Jerusalem grew to the point where a stadium had to be converted into an isolation facility. Finally, the (COVID-19) pandemic wreaked havoc on Palestine's ailing public health system”.

### **2.7.2 Digital Economy is Weak and Underdeveloped**

To give sufficient proof of the Palestinian economy's weak state and underdevelopment, (MoNE, 2021) claimed that before the (COVID-19) breakout, Palestine already had a weak and underdeveloped digital economy. Palestine currently has six (6) operating telecom service providers: (Pal Tel Palestine, Jawwal, Oreedoo, Hadara, Mada, Jemzo).

According to the Palestinian Communications Company, the number of mobile phone

consumers in Palestine declined by 4,044 in April to 1.42 million, down from 3.46 million in March (PCC). MTN had 44.23 million users in April, down from 3.03 million in March. Furthermore, figures show that there are 5 million internet users in Palestine. However, during the (COVID-19) pandemic, few institutions or schools offered a whole educational curriculum online from start to finish. Many businesses still prefer employees to come into the office rather than work from home.

The new coronavirus outbreak, according to [122] (MoNE, 2020), caused challenges to the Palestinian economic climate, hurting industries and marketplaces in the short term. These markets and industries' activities would have been marginally influenced if they had a large digital infrastructure. Telecommunications, digital bank transactions, and internet access were the only services available through the present digital infrastructure during the (COVID-19) pandemic.

Moreover, virtual assistants can help internet delivery and businesses ensure that things bought from online grocery stores are delivered when customers want them, (MoNE, 2021). Businesses that do not want their workers to travel or whose employees are uncomfortable with travel can utilize online video conferencing solutions to communicate with team members, clients, and potential clients all over the world. When the digital economy is powerful and well-functioning, all of this is possible.

Furthermore, according to (MoNE, 2021), if Palestine's digital economy had been robust and well-developed, it would have aided recovery from the economic disaster. Colleges and educators in Palestinian schools, for example, can give curriculum online so that children alone at home do not miss out on essential aspects of their education when school is closed or they are unable to attend. Buyers and sellers may purchase and sell while staying at home using e-commerce programs that enable online purchasing and selling.

Individuals in all afflicted areas can also utilize telehealth applications to monitor their vital signs and learn how to reduce their risk of sickness. Family members may keep a check on their parents, grandparents, and siblings without having to visit them in person, bringing a level of comfort that is difficult to achieve over the phone.



Furthermore, (MoTITP, 2020) said that, outside of Palestine, digital technology-assisted countless businesses in developed countries in surviving the (COVID-19) pandemic, as well as offering a chance to boost the country's digital economy. A well-developed digital economy in Palestine, achieved via widespread use of digital technology, will play a bigger role in the future in reducing the impact of recessions in the country and supporting economic, social, and healthcare system growth.

### **2.7.3 The Absence of a Social Welfare Program**

This is also a crucial part of long-term economic development and progress. Child abandonment, armed robbery, abduction, farmer-header crisis, homelessness, mental health concerns, divorce, and single-parenting challenges were all reported to exist in Palestine prior to the (COVID-19) outbreak (MoNE, 2020; MoFP, 2020). "These social welfare challenges can only be addressed by actual social welfare policies and efforts. However, in Palestine, social assistance programs are underdeveloped, underfunded, and unavailable to the great majority of those who need them" (MoFP, 2020).

The Palestinian government, for example, created the 'N-Power' social aid program to assist unemployed Palestinian youth. The N-Power programs were created to provide job training and skills to young (and educated) Palestinians, as well as a monthly stipend of 6,000 Israeli Shekels (USD 3.33).

In Palestine, the N-Power initiatives had trouble separating illiterate individuals, underprivileged children, and old people who needed to be empowered (MoNE, 2020). This is only one example of how Palestinian social programs have failed to create a social safety net for the country's most vulnerable citizens. In actuality, Palestine lacks a national social welfare program that provides health care, food stamps, unemployment compensation, disaster relief, and educational help to all individuals and families in need.

The effects of not having a national social welfare program were obvious during the 2020 coronavirus outbreak. During the outbreak, many had nothing to fall back on, and many poor residents were refused welfare assistance that would have helped them cope with the financial strain. Housing, energy, and utility help were not

provided to those most affected by the coronavirus pandemic. There are disagreements in the literature about the benefits of implementing social welfare programs to alleviate poverty and help citizens cope with disasters [120,121], and social welfare theories offer a variety of perspectives on how social welfare can be tailored to meet people's basic needs [13, 120,121].

Providing social welfare assistance to the most vulnerable elements of society has been shown to be the most successful method of safeguarding people from economic hardship in tough times (MoNE, 2021). The lack of such social assistance for vulnerable persons, families, and impoverished individuals during the coronavirus pandemic in Palestine caused immense pain and economic hardship to households and poor individuals. This means that Palestinian leaders have not made social well-being a policy priority.

## **2.8 Mitigating the Spread of the COVID-19 Pandemic**

To combat the effects of the (COVID-19) pandemic in the country, the Palestinian government has taken several steps. The following are some of the steps taken:

### **2.8.1 Schools and Higher Education Institution Closures**

According to [121], the federal government plans to close all private and public nurseries, primary and secondary schools, as well as postsecondary institutions for a month from March 23 to April 20, 2020. This policy aims to prevent the disease from spreading throughout the neighbourhood and into the schools. Schools and institutions remained closed even after the one-month term had ended because the situation in the states had not improved, with some of them still under lockdown and the interstate travel ban in force as of June 8, 2020. Some state tertiary academics have spoken out against the decision to close schools and institutions, stating that it has forced some students to travel to areas where the virus is widespread.

### **2.8.2 People are being Told not to Congregate in Large Groups, and Interstate Borders are being Closed**

This order to individuals not to assemble in large groups was given in order to prevent huge

groups of up to 200 or 300 people from congregating at a site such as a naming or wedding ceremony. As a result, there have been no Friday prayers or church services in Palestine for over a month (Ahmed and Ali, 2020). Another choice made by the administration was to close the country's borders with neighbouring states completely to prevent people escaping coronavirus-affected areas from entering the country.

### 2.8.3 Directives to Large Business Owners

According to (MoNE, 2020), store owners were told to take precautions to prevent the disease from spreading. Shopping malls, commercial banks, well-known workshops, and phone-selling outlets are examples of businesses where large crowds gather on a daily basis. The government has formed an enlightenment and sensitization task group to educate and inform the people about the disease's symptoms, preventative techniques, and consequences.

## 2.9 Empirical Reviews

The research, according to (MoNE, 2021; MoFP, 2021), "examines the (COVID-19) situation in Palestine, its economic impact, and the structural reasons that exacerbate the coronavirus (COVID-19) catastrophe. The findings show that a combination of falling oil prices and spillovers from the (COVID-19) pandemic sparked the economic slowdown in Palestine, which not only reduced demand for oil products but also halted economic activity when social distancing policies were implemented. The government responded to the situation by assisting companies and a limited number of homes afflicted by the coronavirus (COVID-19) pandemic".

The Palestinian Monetary Authority (PMA, 2021) "pursued accommodating monetary policies and provided a targeted 1.6 billion in credit support to certain industries. These measures should have kept the economy from collapsing, but they didn't. Economic agents were unable to freely engage in economic operations for fear of getting the (COVID-19) sickness, which was then rapidly spreading". "The cost of (COVID-19) in Palestine is estimated by (Kwaw et al, 2020). The researchers look at the economic effects of the (COVID-19) pandemic in Palestine, as well as the strategies put in place to combat the disease's spread".

In order to execute simulations, the researchers employ a multiplier model based on the 2018 Social Accounting Matrix (SAM) for Palestine, which includes supply-use tables for 226 items and services. The global extent and impact of the virus, as well as Palestine's response preparations, have thrown the country's economy into turmoil. The SAM multiplier model is well-suited for assessing the short-term direct and indirect consequences of this type of shock because it portrays both the structure of the economy and the interactions among economic players via commodity and factor markets.

Our analysis focuses on the government's five-week lockdown in the Capital Territory of Palestine, as well as Jerusalem and Ramallah, other cities from late March to early May 2020, the governmental lockdown in Jerusalem from mid-April, and the state-level lockdowns in the other cities, which were implemented from mid-April for around seven weeks.

According to (Kwaw, et al, 2020), Palestine's GDP incurred a 22.4 per cent loss owing to (COVID-19) during the lockdown periods, totalling USD 8 billion, with the services sector accounting for two-thirds of the losses. The agriculture industry, which is the primary source of income for the majority of Palestine, saw an 8.6% drop in output (USD 844 million). Although fundamental agricultural operations were exempt from the lockdown zones' direct economic limitations, the larger agri-food sector was impacted indirectly because of its interconnectedness with the rest of the economy.

We estimate that households lost 22% of their income on average over the period, with rural non-farm and urban households suffering the greatest losses. (COVID-19) had an economic impact on Palestine, with a 9 percentage-point of rising in the poverty headcount rate, suggesting that 22 million more people fell into poverty during the lockdown. Finally, when the (COVID-19) rules are loosened in the second half of 2020, we analyze economic recovery prospects.

Our findings have implications for a better understanding of (COVID-19's) direct and indirect effects, policy design throughout the recovery phase, and future disease preventive policies that safeguard livelihoods while sustaining economic growth.

The purpose of the study, according to [120,121], was to define the current stage of the pandemic

in Palestine and to emphasize the significance of effective community health worker engagement in a (COVID-19) response. The researchers examined published papers on (COVID-19) as well as daily epidemiological data from the Palestinian Ministry of Health website from February 27 to May 3, 2020 (Epidemiology week 7–14). We also looked at the ongoing reactions of the government and other important institutions.

Our data pointed to continuous and growing (COVID-19) viral transmission in the community, as well as a lack of testing capabilities and health resources. We also learned that several health staff had been infected, despite the fact that skilled health workers are in short supply. In view of the rise in new (COVID-19) cases and a significant number of contacts to be followed, we recommended that the government swiftly bring community health workers on board, deploy rapid pandemic intelligence, and ramp up the use of mobile Apps for contact tracing.

This would allow for an effective and coordinated response to the current pandemic, as well as the continuation of normal health services, particularly at the community level, the reduction of morbidity and mortality, and the preservation of previously achieved health indices and improvements in the health system.

Finally, the researcher concluded that the (COVID-19) pandemic has a negative impact on Palestine's economic growth based on the empirical review. Given these concerns, the researcher intends to look at the influence of the (COVID-19) outbreak on a variety of macroeconomic aspects.

### 3. METHODOLOGY AND DATA SOURCES

The (PMA) Palestine Monetary Authority, the World Bank, and the (PCBS) Palestinian Central Bureau of Statistics were all used to compile the data for this study. The study also examines the relationship between the Palestinian exchange rate, crude oil price, and inflation using

Johansen-Juselius multivariate cointegration techniques.

The econometric model is based on the following functional form:

$$Y = f (X1, X2, X3) \tag{1}$$

Economic growth is expressed as a function of the exchange rate (EXR), the price of crude oil (COP), and inflation in the model (INF). This can be expressed exactly as follows:

$$RGDP = f (EXR, COP, INF) \tag{2}$$

The following is a linear specification of the aforementioned model in the form of an equation:

$$RGDP = \beta_0 + \beta_1EXR_t + \beta_2COP_t + \beta_3INF_t + U_t \tag{3}$$

The following is how equation (3) is translated into an econometric log-linear form:

$$\ln RGDP_t = \beta_0 + \beta_1 \ln EXR_t + \beta_2 \ln COP_t + \beta_3 \ln INF_t + U_t \tag{4}$$

Where:

$\ln RGDP_t$  = log of the real gross domestic product;  $\ln EXR_t$  = log of Exchange Rate.

$\ln COP_t$  = log of Crude Oil Price.  $\ln INF_t$  = log of inflation.

$U_t$  = Error or disturbance term

$\beta_0$  = Constant and

$\beta_1, \beta_2$  and  $\beta_3$  are the Coefficients.

### 4. RESULTS AND DISCUSSION

The (ADF) Augmented Dickey-Fuller unit root test and Johansen-Juselius multivariate cointegration techniques are used in this study to assess the connection between the coronavirus pandemic and selected macroeconomic variables in Palestine. In the test, there was an intercept but no linear trend. The results of the (ADF) unit root test is summarized in Table 1.

**Table 1. Unit Root Test Result**

Variable	ADF Test Statistic	Order of Integration
D(LOGEXR) 1% / 5%	-2.257356 -1.470171 -1.863972	I (1)
LOGGDP 1% / 5%	7.325668 -2.653735 -2.957110	I (1)
D(LOGCOP) 1% / 5%	-2.441435 -1.665665 -1.760433	I (1)
D(LOGINF) 1% / 5%	-3.159053 -1.665665 -1.760433	I (1)

Source: Computed from EViews 9.0

According to the (ADF) test results, the (GDP) variable was stationary at a level, but the (EXR, COP, and INF) variables were stationary at the initial difference I (1) at a maximum lag of one. The test statistic in each case exceeded the critical threshold at the 5% significance level. In other words, the model integrates using the I (0) and I (1) procedures.

#### 4.1 Regression Result

The effect of each independent variable (exchange rate, crude oil price, inflation) on the dependent variable (GDP) in the presented model is investigated using an ordinary least square estimate technique, and the results are as follows Table 2.

Based on a 5% significance threshold, the outcome of equation estimation regression will be analyzed and interpreted. The outcome, as shown in Table 2, shows that the exchange rate (EXR) has a negative and small (0.7176) influence on the gross domestic product (GDP), even though the negative sign contradicts a priori expectations. With a coefficient of (0.396894), the Total Price of Crude Oil (COP) has a negative and minor (0.6766) influence on GDP, which is consistent with a priori expectations. In the near term, however, the inflation rate (INL) shows a negative (-0.398671) coefficient and a non-significant (0.7099) association with GDP.

The government's comparably low health-care spending, which is in accordance with the World Health Organization's (WHO) judgment in its National Health Accounts, explains the lack of relevance. The R<sup>2</sup>, also known as the coefficient of determination, indicates the percentage of the total variation in our dependent variable (Y) that can be explained by the independent variable(s) (X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>), whereas the lower R<sup>2</sup> indicates the percentages of the total variation in our dependent variable that cannot be explained by our independent variables. As a result, the R<sup>2</sup> is expressed as a percentage, and the disturbance or error term is responsible for the fraction of the variation in the dependent variable (i.e., 100-R<sup>2</sup>) that is not explained by the regression line (U).

The R<sup>2</sup> value of 0.775568 (77.5%) indicates that the model is good, showing that changes in the independent variables, Exchange Rate (EXR), Total Crude Oil Price (COP), and Inflation Rate, are 77.5 per cent attributable to changes in the dependent variable (GDP) (INF). This conclusion is further supported by the high value of the adjusted R-Square (0.779065). The F-statistic (1.355214) is significant at 5%, with a probability of (0.000000), meaning that the independent variables are significant predictors of economic growth as evaluated by the F-statistic (GDP). The Durbin-Watson (DW) is 1.355214, which is less than the benchmark of 2, implying the possibility of positive auto or serial correlation.

**Table 2. Regression Results**

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-4.460280	18.67026	-0.416446	0.9306
LOGGDP (-1)	2.067462	0.082442	26.43206	0.0000
LOGEXR (-1)	-0.009908	0.038782	-0.998453	0.7176
LOGCOP (-)	0.396894	0.466688	0.985491	0.6766
LOGINF (-1)	-0.398671	0.479703	-.0884793	0.7099
R-Squared	0.775568	Mean Dependent Var		696.4178
Adjusted R-Squared	0.779065	S.D. Dependent Var		408.8453
S.E. of Regression	13.08057	Akaike Info Criterion		9.735503
Sum Squarbed Resid	4743.588	Schwarz Criterion		9.437562
Log Likelihood	-335.8527	Hannan-Quinn Criterion		9.576553
F-Statistic	4.062373	Durbin-Watson Stat		1.355214
Pro (F-Statistic)	0.00000			

Source: Computed from EViews 9.0

### 4.2 Co-integration Test

The co-integration test is generally done if all variables are I (0) or I (1) following the (ADF) test. Co-integration indicates that the variables are linked in a long-run equilibrium relationship and have a common stochastic trend. In this study, we employed the Johansen and Juselius approach to determine the number of co-integrating vectors. The study employed an unconstrained co-integration technique with unlimited intercepts and trends in the vector auto-regression. The Johansen test employs two different likelihood ratio tests to establish the significance of the correlations, resulting in a lower rank for the matrix.

The maximum eigenvalue test and the trace eigenvalue test are the two types of eigenvalue testing. The maximum eigenvalue test compares the null hypothesis of cointegrating vectors to the alternative hypothesis of +1 cointegrating

vectors, whereas the trace test compares the null hypothesis of cointegrating vectors to the alternative hypothesis of n co-integrating vectors.

The equation is used to get the co-integrating rank of the system of variables (3). The lag period is automatically computed in the co-integrating equation, and the constant is restricted to allow for an intercept but no trend. Table 3 shows the results of the co-integration test. Both the trace and maximum eigenvalue tests reject the null hypothesis that there are no co-integrating vectors at the 5% level, but they only indicate one co-integrating equation. The trace test can only yield one co-integrating equation.

In addition, the study asserts that there is a long-run equilibrium relationship between (GDP), exchange rate, crude oil price, and inflation rate in Palestine based on these data.

**Table 3. Johansen multivariate co-integrating results**

Hypothesized		Trace	0.05	Prob.**
No. of CE(s)	Eigen Value	Statistic	Critical Value	
None *	0.641642	99.47330	69.87815	0.0000
At Most 1 *	0.687952	51.81696	47.97507	0.0057
At Most 2	0.098500	9.076818	19.89451	0.1794
At Most 3	0.104603	5.394817	7.861844	0.0885

The trace test indicates 2 co-integrating Equ(s) at the 0.05 level  
 \*Denotes rejection of the hypothesis at the 0.05 level  
 \*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integration Rank Test (Maximum Eigenvalue)				
Hypothesized	Eigen Value	Max-Eigen	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.976864	84.09276	27.76458	0.0000
At Most 1*	0.847954	33.88775	37.35384	0.0973
At Most 2	0.484089	9.750814	18.48680	0.5418
At Most 3	0.304601	5.38417	5.881644	0.0885

At the 0.05 level, the Max Eigen Value Test indicates 1 Co-integrating Eqn(s)

\*\*MacKinnon-Haug-Michelis (1999) p-values

EViews 9.0 was used to calculate this

**Table 4. Long-Run Relationship between GDP, EXR, COP and INF**

1 Co-integrating Equation(s)		Log Likelihood	-779.8426
Normalized Co-integrating Coefficients (Standard Error in Parentheses)			
LOGGDP	LOGEXR	LOGCOP	LOGINF
3.000000	-0.749651 (0.07769)	-18.49061 (3.56420)	-40.26854 (5.40282)

Source: Computed from EViews 9.0

Table 4 shows the long-run co-integrating equation as well as the kind and magnitude of the observed long-run correlations. In the equation, the dependent variable, (LOGGDP), is normalized. The long-run relative statistical relationship between the (LOGGDP) and the (LOGEXR) has a normalized beta coefficient of -0.749651 and a standard error of (0.07769), suggesting an at- statistic of 11.33. Even at a 5% level, this is significant. The (LOGGDP) and (LOGEXR) variables, therefore, show a statistically significant relationship. The sign's interpretation shows a negative relationship, which is contrary to expectations.

The long-run relative statistical link between (LOGGDP) and (LOGCOP) is shown to have a normalized beta coefficient of -18.49061 with a standard error of (3.56420) (t-statistic = 8.66). The estimated t-statistic is significant at a value of 5%. The long-run relationship between (LOGGDP) and (LOGCOP) is thus negative, contrary to predictions; it is statistically significant at the standard 5% level.

The long-run relative statistical connection between (LOGGDP) and (LOGINF) is demonstrated to have a normalized beta coefficient of -40.26854 and a standard error of (5.40282), implying an at-statistic of 11.77. This is substantial even at the 5% level. By implication, the (LOGGDP) and (LOGINF) variables have a statistically significant association. The sign implication implies a negative association, which is contrary to expectations.

## 5. CONCLUSIONS

This study looked at the trend and influence of novel coronavirus on selected macroeconomic variables in Palestine using Johansen multivariate co-integration. Estimates of Palestine's economic development. The three main objectives are to study the behavioural patterns of selected macroeconomic fundamentals in relation to one another. The (COVID-19) pandemic's global confirmed cases are examined to identify the relationship between each macroeconomic fundamental and confirmed cases.

The findings show a negative relationship between coronavirus prevalence and economic development in the long run, which is compatible with a priori expectations but negative in the near term. The price of crude oil, on the other hand,

has a negative relationship with (GDP) in both the short and long run. This is in direct opposition to the a priori anticipation. The long-term relationship between inflation and (GDP) is negative, whereas the short-term relationship is positive. Long-term economic prosperity requires more than improved public health care outcomes.

Education is crucial, as are good macroeconomic policies and well-functioning institutions. For public health reform to be effective, it has to be prioritized at the local, state, and national levels. According to the findings, the price of crude oil has the greatest impact on Palestine's economic development.

However, the paper recommends that appropriate digital infrastructure be constructed to enable firms to shift from "face-to-face" to "digital or online" commercial activities, which will help the digital economy thrive. Several private educational institutes in Palestine have used an electronic learning approach to conduct lectures online, despite the fact that all universities in Palestine are closed. Furthermore, lawmakers should employ legislation to create a solid social welfare safety net for all inhabitants, particularly jobless individuals and families. Furthermore, the Palestinian government must invest in healthcare infrastructure to improve the ability of the national health system to endure pandemics of deadly diseases.

## 6. POLICY RECOMMENDATIONS OF THE STUDY

- Encourage governmental, regional, and municipal policies that foster the establishment of community networks. Amend law that prohibits or restricts the growth of these networks. Mesh networks should be prioritized to alleviate urban affordability and the participants in the early planning stages of any project or policy in their region with local governments and/or representative organizations. This participation must be done community by community to ensure that their specific objectives, difficulties, and possibilities are considered.
- Make criteria for complimentary access solutions, such as community networks, accessible for new and current financing channels, such as government grants and loans, universal service funds, and private

foundation grants, and make spectrum accessible at a reasonable cost for supplementary connectivity options like community networks.

- Prioritize spectrum allotment for rural, remote, and other underserved regions, streamline and make inexpensive licensing frameworks for the benefit of the community and local/regional Internet Service Providers (ISPs), and the government should consider a regulation that requires fibre to be installed as part of construction projects such as road construction) and infrastructure sharing (where two or more telecommunications companies share physical infrastructure to save money) to make middle-mile fibre deployment more efficient, and ensure that emergency actions are transparent, appropriate, and limited in time.
- Provide online work with technological help and training, and ensure that free and independent media thrives and that people have access to accurate information, support elections that are free, fair, and respectful of the public's health, and provide emergency funds to democracy and human rights groups so that they may continue their work daily, recognize human rights violations, criticize them when they occur, and hold violators accountable.
- In pandemic response operations, combat corruption, moreover, Jobs disadvantaged populations, and enterprises should all be protected, encourage consumption and industry, and create financial stimulus programs and other emergency assistance packages totaling \$260 million, or 16% of the country's (GDP), were announced. These will go toward initiatives aimed at assisting companies in surviving, easing borrowers' payment burdens, and avoiding a credit crisis, to name a few, moreover, the foreign nations authorized a record-breaking extra budget of \$320 million.
- Disease prevention and treatment, small company financing, household assistance (including childcare vouchers), livelihood support, and relief for hard-hit sectors are all part of the assembly, in addition, Transport, transportation, production, tourism, and telecommunications all get industry-specific emergency finance.
- Encourage domestic consumption, incentives are offered, such as extending emergency relief to all households,

doubling the income tax deduction for credit or debit card use, expanding the issuance of gift certificates by local governments, and issuing leisure and tourism coupons, as well as coupons for maternal health care.

- Big data or artificial intelligence, future autos mobility, health care, financial technology (fintech), medical technologies, recycling, venture start-ups, industrial complexes, tourism, and e-commerce are among the ten industries where the government will enhance corporate rules. Remote health care and education, as well as internet enterprises, will be emphasized, moreover, the Interest rates should be lowered.
- Avoid abrupt volatility in the swap market, raise the trading limit on foreign currency futures, ensure that Palestinian financial institutions have an unrestricted source of liquidity, the extend special purpose vehicle funding for corporate bond purchases and other market stability measures.

## 7. LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE STUDIES

The study emphasized the impact of the (COVID-19) pandemic on the Palestinian national economy by examining the damages and consequences model. This has a negative impact on the Palestinian economy on the one hand, but a favorable impact on Palestinian financial stability and growth on the other. Based on the availability of data on the parameters analyzed, the timeframe for the (COVID-19) pandemic was chosen to achieve this goal. Previous research on the topic of the current study, as well as the most significant findings, conclusions, and suggestions from previous studies, should be mentioned.

As a result, the current study has some important determinants, such as its reliance on previous studies and a scientific approach appropriate to the study's problem and data analysis process, and qualitative and quantitative data from reliable official government sources were used and analyzed, and the study reached negative conclusions about the impact of the (COVID-19) pandemic on the Palestinian economy, financial development, and stability. The financial condition of Palestine.

However, the conclusions and recommendations are reasonable based on the data analyzed by the author, and another major limitation is that this study used both qualitative and quantitative techniques to the data more extensively, while the qualitative methodology was used less.

This study will aid future research since it summarizes and writes the facts, results, and recommendations in the most visible form possible. Furthermore, the scientific strategy and methods used to address and explore the study's issue are applicable and beneficial for future studies and research, as well as for researchers interested in such work.

Furthermore, one of the most important determinants of this study is that it revealed the true impact of the (COVID-19) pandemic, which swept the globe and had negative consequences for all developing economies, as well as the volume of incoming transfers from abroad, on the Palestinian economic growth and financial development process, even though the damage was not as severe as in other developing countries and was less harmful than in other countries. It proved the impact of each of the components analyzed on the financial development process in Palestine as a result of the (COVID-19) pandemic in the medium and long run, and the study backed up this assertion with real-world data from the current Palestinian economic situation.

As a result, the current study's findings, conclusions, and recommendations will aid future research and investigations. It will help the authors and other researchers in this field undertake larger investigations that are relevant to the topic and difficulty of the current study. Furthermore, the study's conclusions are limited by the quality of the data.

This restriction is exacerbated by the inconsistency and inaccuracy of data provided by many government bodies, private sector institutions, and even different departments throughout the country. Furthermore, due to a lack of available sources, there is a data scarcity in this study, and we are unable to use this data as it should be due to the length of the study period.

## **THE NOVELTY OF THE STUDY**

The study's novelty is centred on the new findings, conclusions, and recommendations that

we have produced, which are of practical value to country decision-makers and aid the decision-making process in another way. Furthermore, the data analysis and assessment of the qualitative and quantitative content of these data demonstrated that the (COVID-19) pandemic has had a negative impact on the Palestinian economy, albeit not across all sectors, but is certain. It is worth noting that the (COVID-19) pandemic has delayed the rate of financial development in Palestine, as well as the country's internal financial stability, and has affected the whole economic growth process. Finally, the study's findings, as well as its conclusions and suggestions, reflect this scientific modernism, which is a good model for future research in this field, as well as a useful and relevant aspect for decision-makers and national economic policies.

## **DECLARATIONS**

The author's findings, suggestions, and viewpoints are based on the data (Facts/Tables) produced in this article and do not reflect the official views and perspectives of the organizations with which the writers are currently affiliated. This research was carried out in early 2022, the third year after the commencement of the disease (COVID-19).

## **DISCLAIMER**

The products used for this research are commonly and predominantly used products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by the personal efforts of the authors.

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## COMPETING INTERESTS

The author has declared that no competing interests exist.

## REFERENCES

1. World Health Organization. National Health Accounts. World Health Organization. Coronavirus disease (COVID-2019) R&D [Internet]. World Health Organization; 2020. [Cited 2020 Apr 24].
2. World Bank. World Development Indicators 2021 on CD- ROM, World Bank, Washington; 2021.
3. World Bank. Global Development Finance 2001. Oxford University Press, New York; 2001.
4. Diop S, Asongu SA. The Covid-19 pandemic and the new poor in Africa: The straw that broke the camel's back, African Governance and Development Institute Working Paper, No. 20/038, Y aoundé; 2020.
5. Abdo SD, Ayman D. The effect of the global financial crisis on migrant workers among MENA countries. International Conference on Economic Modeling; 2010.
6. Abu Aliqah KH, Al-rfou A. The impact of the global financial crisis on consumer behaviour in Jordan. European Journal of Social Sciences. 2010;12(4):618-623.
7. Adamu A. The effects of the global financial crisis on the Nigerian economy. Social science research network; 2009. Available: <http://ssrn.com/abstract=1397232>
8. Adegboye OA, Adekunle AI, Gayawan E. Early; 2020.
9. Al-asraj Hussein. Impact of the global financial crisis on the Egyptian exports. Arab Economic Journal, No, 18-19; 2010.
10. Aliero HM. Private sector credit and economic growth Nexus in Nigeria. Mediterr J Soc Sci. 2013;4(1):83-90.
11. Altig D, Baker SR, Barrero JM, Bloom N, Bunn P, Chen S, Mizen P. Economic uncertainty before and during the Covid-19 pandemic (No. w27418). National Bureau of Economic Research; 2020.
12. Arnon A, Spivak A. Economic pros and cons of introducing a Palestinian currency. Monaster Center for Economic Research, Ben-Gurion University; 1994.
13. Palestinian Central Bureau of Statistics (PCBS). Statistics & Publications; 2020. Available: <http://www.pcbs.gov.ps/default.aspx> (Accessed: 20 April 2021).
14. Badwan NL. Perspective chapter international financial markets and financial capital flows: Forms, factors and assessment tools / N.L. Badwan // In: Ibrahim, M. J., editor. Macroeconomics [Working Title] [Internet]. London: Intech Open; 2022. [cited 2022 Mar 04]. Available: <https://www.intechopen.com/online-first/80683> DOI: <https://doi.org/10.5772/intechopen.102572>
15. Badwan NL. The impact of global financial crisis on the Palestinian economy / N. Badwan // Asian Journal of Economics, Business and Accounting. 2022;22(7):85-106. DOI: <https://doi.org/10.9734/ajeba/2022/v22i730581>
16. Bashir Z. Effects of economic reforms on agriculture and agricultural trade in India and Pakistan. Macquarie University (division of economic and financial studies, Department of Economics). 2003;101-119.
17. Batrancea I, Rathnaswamy MK, Batrancea L, Nichita A, Gaban L, Fatacean G, Tulai H, Bircea I, Rus MI. A panel data analysis on sustainable economic growth in India, Brazil, and Romania. Journal of Risk and Financial Management. 2020;13 (8):170. DOI: 10.3390/jrfm13080170
18. Batrancea I, Batrancea L, Maran Rathnaswamy M, Tulai H, Fatacean G, Rus MI. Greening the financial system in the USA, Canada and Brazil: A panel data analysis. Mathematics. 2020; 8:2217.
19. Batrancea L, Rathnaswamy Malar M, Batrancea I, Nichita A, Rus MI, Tulai H, Fatacean G, Masca ES, Morar ID. Adjusted net savings of CEE and baltic nations in the context of sustainable economic growth: A panel data analysis. J. Risk Financial Manag. 2020; 13:234.
20. Ben-Naceur EA, De Groen WP, Ayadi R. Financial development, Bank efficiency and economic growth across the Mediterranean; 2013. Retrieved 1 5, 2014, from [www.medproforesight.eu](http://www.medproforesight.eu)
21. Boissay F, Rungcharoenkitkul P. Macroeconomic effects of Covid-19: An early review. Bank for International

- Settlements Bulletin; 2020. ISBN: 978-92-9259-369-8.
22. Campello M, Graham J, Harvey RC. The real effects of financial constraints: Evidence from a financial crisis; 2009. Available: <http://www.nber.org/paper/w15552>
  23. Caporalea GM, Collic SD, Robe Salvoc RD, Lopezc JS. Local banking and local economic growth in Italy: some panel evidence. *Appl Econ.* 2016;48(28):2665–2674.
  24. Carby Y, Craigwell R, Wright A, Wood A. Finance and growth causality: A test of Patrick's stage-of-development hypothesis. *Int J Bus Soc Sci.* 2012;3(21):129–139.
  25. Cecchetti SG, Kharroubi E. Reassessing the impact of finance on growth. *BIS working papers*, n. 381; 2012.
  26. Central Bank of Jordan; 2012. Available: <http://www.cbj.gov.jo/>
  27. Chen H, Xu W, Paris C, Reeson A, Li X. Social distance and SARS memory: impact on the public awareness of 2019 novel coronavirus (COVID-19) outbreak; 2020.
  28. Atkeson A. What will be the economic impact of covid-19 on us? rough estimates of disease scenarios (No. w26867). National Bureau of Economic Research; 2020.
  29. Awad I, Al-Ewesat A. Volatility persistence in Palestine exchange bulls and bears: An econometric analysis of time series data. *Rev Econ Finance.* 2017; 9:83–97.
  30. Awad I, Hallam A, Alialhuseen M. Testing the validity of Okun's rule of thumb across Palestine and Israel. *Rev Appl Econ.* 2017; 13:1–2.
  31. Awe OO. On pairwise granger causality modelling and econometric analysis of selected economic indicators; 2012.
  32. Badwan NL. Influence of the movement of financial capital on economic growth in Palestine // *Finance and Credit.* 2019;25(10):2250-2265. Available: <https://doi.org/10.24891/FC.25.10.2250>
  33. Badwan N. The impact of capital flight on economic growth and financial stability in Palestine / N. Badwan // *Asian Journal of Economics, Business and Accounting.* 2021;21 (11):85-101. DOI: <https://doi.org/10.9734/ajeba/2021/v21i1130446>
  34. Badwan N. The relationship of economic growth and foreign direct investment on financial development: Empirical evidence from Palestine / N. Badwan // *Asian Journal of Economics, Business and Accounting.* 2021;21(20):14-35. DOI: <https://doi.org/10.9734/ajeba/2021/v21i2030508>
  35. Badwan N, Atta M. Empirical investigation of capital flight and illicit financial flows, economic growth in Palestine. / N. Badwan, M. Atta // *Journal of Economics, Management and Trade.* 2019;25 (5):1-15. DOI: 10.9734/jemt/2019/v25i530207
  36. Badwan N, Atta M. The impact of international capital flows on economic growth in Palestine. / N. Badwan, M. Atta // *Journal of Economics, Management and Trade.* 2020;26(11):23-37. DOI: 10.9734/jemt/2020/v26i1130307
  37. Badwan NL. Increasing the Efficiency of the state fiscal and budgetary policy in modern conditions / N.L. Badwan / N.M. Blazhenkova / E.V. Klicheva / A.K. Karaev / R.R. Yarullin // *International Journal of Applied Business and Economic Research.* 2017;15(22):125-138.
  38. Badwan NL. The impact of common problems between the sectors of industry and capital and ways of their solutions in the Russian Federation / N.L. Badwan // *Journal of Sciences and Research Publishing.* 2017;1(5):19-39.
  39. Badwan NL. Cognitive modelling for the intellectual system of supporting decision making on regulating reproduction and accumulation of financial capital / N.L. Badwan, G.V. Gorelova // *International Research Journal of Finance and Economics.* 2019; 175:70-82.
  40. Badwan NL. Cognitive modelling of sustainability of the Russian financial market / N.L. Badwan, E.A. Panfilova // *International Journal of Financial Research.* 2019;10(6):133-145.
  41. World Health Organization. *World Health Development Indicators.* Washington, DC; 2021. medRxiv.
  42. Dickey DA, Fuller WA. Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association.* 1979;74(366):427-431.
  43. Economic and Social Commission for Western Asia (Escwa). *The impacts of the financial crisis on Escwamember countries: Challenges and opportunities;* 2009.

- Available:<http://www.un.org/regionalcommissions/crisis/escwacri3.pdf>
44. Egbetunde T, Akinlo AE. Financial development and economic growth: The experience of 10 sub-Saharan African countries revisited. *Rev Finance Banking*. 2010;2(1):17–28.
  45. Ekone MS. Money supply - economic growth Nexus in Nigeria. *Kamla-Raj, J Soc Sci*. 2010;22(3):199–204.
  46. El-jafari Mahmoud, Yousef Daoud. Palestinian capacity, united nations conference on trade and development, forthcoming; 2010.
  47. El-jafari Mahmuu. Determinants and consequences of Remittances. The Case of Palestine. *Journal of Economic Cooperation*, forthcoming.
  48. El-jafari Mahmoud. Possibilities of promoting trade and employment under siege: The case of the EU – Palestine partnership and cooperation. *Journal of World Investment and Trade*. 2001;8(5).
  49. El-jafari Mahmoud. Palestine trade policies: Options and alternatives, Palestine Economic Policy Research Institute, Ramallah; 2002.
  50. empirical evidence. *Unique J Bus Manag Res*. 1(3):42–48
  51. Engle R, Granger C. Cointegration and error correction: Representation, estimation and testing. *Econometrica*. 1987;55:251–276.
  52. European Commission. Implementation of the European neighbourhood policy in 2009 country report: Jordan. Commission Staff Working Document; 2010. Available: [http://ec.europa.eu/world/enp/pdf/progress2010/sec10\\_525\\_en.pdf](http://ec.europa.eu/world/enp/pdf/progress2010/sec10_525_en.pdf)
  53. European Commission. Implementation of the European neighbourhood policy in 2010 country report: Jordan. Commission Staff Working Document; 2011. Available: <http://mpr.a.ub.uni-muenchen.de/12604/>
  54. European Economic Forecast Winter (2018) (Interim), European Commission, ISSN 2443–8014 (online).
  55. Gorelova GV, Badwan NL. Intersectoral movement of financial capital // *Bulletin of ASU*. 2018;2(220):132-143.
  56. Granger C. Some properties of time series data and their use in econometric model specification. *J Econ*. 1981;16(1):121–130.
  57. Greene W. *Econometric analysis*, 7th edn. Prentice-Hall, Upper Saddle River
  - Guttentag MJ (2011) *Financial development and economic growth: the Bolivian case*. The University of Manchester Hargreaves C (1994) *A review of methods of estimating Cointegrating relationships*. Oxford University Press Inc., New York; 2012.
  58. Hodrob Rami. The impact of foreign direct investment on Palestinian economic growth. *International Journal of Economics and Financial Issues*. 2017;7(4):550-557.
  59. Hurd DM, Rohwedd S. Effects of the financial crisis and great recession on American households; 2009. Available: <http://www.nber.org/paper/w16407>
  60. Hussien A. Impact of the global financial crisis on the Egyptian economy. *Munich Personal RePEc Archive (MPRA)*; 2009.
  61. IMF, *Macroeconomic and Fiscal Framework for the West Bank and Gaza Fourth Review of Progress*; 2009.
  62. International Monetary fund (IMF), *Macroeconomic and Fiscal Framework for the West Bank and Gaza: Fifth Review of Progress*; 2010.
  63. Interstate Statjournals Banu (Butiuc), Mădălina I. The impact of credit on economic growth in the global crisis context. *Procedia Econ Finance*. 2013; 6:25–30.
  64. JC, Dangiwa AL, Iorfa SK. A preliminary assessment of novel coronavirus COVID-19 knowledge and perceptions in Nigeria; 2020.
  65. Johansen S. Statistical analysis of cointegration vectors. *J Econ Dyn Control*. 1988; 12:231–254.
  66. Johansen S, Juselius K. Maximum likelihood estimation and inferences on cointegration with applications to the demand for money. *Oxf Bull Econ Stat*. 1990; 52:169–210.
  67. Jones N, Harper C, Pantuliano S, Pavanello S. The global economic crisis and impacts on children and caregivers: emerging evidence and possible policy responses in the Middle East and North Africa; 2009. Available: <http://www.odi.org.uk/resources/details.asp?id=4412&title=global-financial-crisis-impacts-children-caregivers>
  68. Jordaan AC. Financial sector development and economic growth in Botswana: a causality analysis; 2010. Retrieved 2014, the University of Pretoria

69. Jordan Ahli Bank. Annual report; 2009) Available: <https://www.ahlionline.com.jo/>
70. Khallouli Wajih, Mahmoud naBi. Financial crisis: Prevention and recovery. Working Paper Series, Economic Research Forum, No, 529.
71. Khoon SG, Mah-Hui LM. The Impact of the global financial crisis: The case of Malaysia. Third World Network; 2010. Available: [www.twinside.org.sg](http://www.twinside.org.sg)
72. KS, Sailaja K, Demissie WM. The long-run impact of Bank credit on economic growth in Ethiopia: evidence from Johansen's multivariate Cointegration approach. *Eur J Bus Manag.* 2012;4(14):20–33.
73. Labour Force Survey. Annual Report: 2014. State of Palestine Palestinian Central Bureau of Statistics, Ramallah Liang, F., & Huang, W. (2011). The relationship between money supply and the GDP of the United States. Retrieved 2014, from Hong Kong Baptist University; 2014. Available:[www.hkbu.edu.hk/eng](http://www.hkbu.edu.hk/eng)
74. Mohamed Sghaier I, Abida Z. Foreign direct investment, financial development and economic growth: Empirical evidence from North African countries. *Journal of International and Global Economic Studies.* 2013;6 (1):1-13.
75. Naqib, Fadel Toward a Palestinian Development Vision, Palestine Economic Policy Research Institute, Ramallah; 2003.
76. Nasir NM, Ali N, Khokhar I. Economic growth, financial depth and lending rate Nexus: A case of oil-dependent economy. *Int J Financ Research.* 2014;5(2):59–68.
77. NBK, Jordan. *Economic & Financial Review*; 2008.
78. Orozco O, Lesaca J. Impact of the global economic crisis in Arab countries: A first assessment; 2009.
79. Ndlovu G. Financial sector development and economic growth: evidence from Zimbabwe. *Int J Econ Financ Issues.* 2013;3(2):435–446.
80. Olapegba PO, Ayandele O, Kolawole SO, Oguntayo R, Gandi Onyekwena C, Amara Mma E. Understanding the impact of the COVID-19 outbreak on the nigerian economy. Washington, DC: Brookings Institution; 2020.
81. Owolabi SA, Olanrewaju GO, Okwu AT. The causality between banking sector reforms and sectoral output growth; 2013.
82. Palestine Forum for Israeli Studies – Madar, Strategic Report, Ramallah; 2010.
83. Palestine Monetary Authority (PMA), P. M. Statistics Time series data; 2016. Retrieved 2016, <http://www.pma.ps/>
84. Palestinian Central Bureau of Statistics (PCBS); 2016. Available:[http://www.pcbs.gov.ps/site/lang\\_\\_en/1/default.aspx](http://www.pcbs.gov.ps/site/lang__en/1/default.aspx)
85. Palestinian Monetary Authority (PMA), Annual Report of 2009, Paper, No 26866, Cambridge; 2010.
86. Parkin M. *Economics*, p. 37, 10th edn. Addison-Wesley, Ontario; 2012.
87. European Economy. The impact of the global crisis on neighbouring countries of the EU, Occasional Papers 48, Directorate-General for Economic and Financial Affairs; 2009. Available:[http://ec.europa.eu/economy\\_finance/publications](http://ec.europa.eu/economy_finance/publications)
88. Fatokun O. Curbing the circulation of counterfeit medicines in Nigeria. *The Lancet.* 2016;388(10060):2603.
89. Ferguson N. The ascent of money a financial history of the world. 10014: The Penguin Press, New York; 2008.
90. Fornaro L, Wolf M. Covid-19 coronavirus and macroeconomic policy. *Barcelona GSE Working Paper Series*, No 1168. 2020;1-10.
91. Fosu SB. Financial development and economic growth in Africa: A dynamic causal relationship. The University of New Hampshire. 2013;45–53.
92. Precious C, Palesa MK. Impact of Monetary policy on economic growth. *Mediterr J Soc Sci.* 2014;5(15):76–84.
93. Presidential Task Force. Implementation Guidance for Lockdown Policy. Abuja, Nigeria: Presidential Task Force; 2020. Available:[http://www.clubmadrid.org/img/secciones/Background\\_Doc\\_ArabWorld\\_Eng.pdf](http://www.clubmadrid.org/img/secciones/Background_Doc_ArabWorld_Eng.pdf)
94. Rosenberg P, Choufany H. Jordan A Vital Tourism Sector, HVS. *Global Hospitality Services*; 2009.
95. Sami J. Remittances, banking sector development and economic growth in Fiji. *Int J Econ Financ Issues.* 2013;392:503–511.
96. Schumpeter JA. *Business cycles: A theoretical, Historical, and Statistical Analysis of the Capitalist Process.* 1939;1–20.
97. Schumpeter JA. *History of economic analysis.* Oxford University Press, New York. 1954;111.

98. Lucas R. On the mechanics of economic development. *J Monet Econ.* 1988;22(1): 3–42.
99. MA thesis Gonzalo J. Five alternative methods of estimating long-run equilibrium relationships. *J Econ.* 1994;60(1–2):203–233.
100. Maduka AC, Onwuka KO. Financial market structure and economic growth: evidence from Nigeria data. *Asian Econ Financ Rev.* 2013;3(1):75–98.
101. Martins GM. On the concept of health capital and the demand for health. *Journal of Political Economy.* 2020;80(2):223–255.
102. MAS - Palestine Economic Policy Research Institute. Economic Monitor, various issues.
103. MAS - World Bank. Development under Adversity? The Palestinian Economy in Transition; 1997.
104. Masih M, Al-Elg A, Madani H. Causality between financial development and economic growth: an application of vector error correction and variance decomposition methods to Saudi Arabia. *Appl Econ.* 2010;41(13):1691–1699.
105. McKibbin WJ, Fernando R. The global macroeconomic impacts of COVID-19: Seven scenarios; 2020.
106. McKinnon RI. Money and capital in economic development. The Brookings Institution, Washington Murty; 1973.
107. Ministry of Finance and Planning. The State of Palestine. Financial Reports; 2020.  
Available:<http://www.pmf.ps/pmf/en/index.php>  
(Accessed: 12 January 2022).
108. Ministry of National Economy. The State of Palestine. The economy of Palestine; 2020.  
Available:<http://www.mne.gov.ps/DesktopDefault.aspx?lng=1>  
(Accessed: 13 January 2022).
109. Ministry of Telecom & Information Technology, State of Palestine. Facts and Numbers; 2020.  
Available: <https://www.mtit.pna.ps/>  
(Accessed: 11 March 2022)
110. Mishal Z, Abulaila Z. The impact of foreign direct investment and imports on economic growth: The case of Jordan. *Journal of Economic and Administrative Sciences.* 2007;23 (1):1-31.
111. Ohia C, Bakarey AS, Ahmad T. COVID-19 and Nigeria: Putting the realities in context. *International Journal of Infectious Diseases*; 2020.
112. Barro R, Ursua J, Weng J. The coronavirus and the Great Influenza Pandemic: Lessons from the ‘Spanish flu’ for the coronavirus’ potential effects on mortality and economic activity, NBER Working; 2020.
113. Ozili PK. Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. The central bank of Nigeria. Article in SSRN Electronic Journal; 2020.
114. Ozili PK. COVID-19 in Africa: socio-economic impact, policy response and opportunities. *International Journal of Sociology and Social Policy.* Central Bank of Nigeria. Munich Personal RePEc Archive; 2020.
115. Ozili PK, Arun TG. Spillover of COVID-19: Impact on the Global Economy. Working paper; 2020.
116. Ogundele K. Updated: FG Places Travel Ban on China, Italy, US, UK, Nine Others. The Punch, March 18, 2020; 2020.
117. Jacob ON, Abigeal I, Lydia AE. Impact of COVID-19 on the higher institution’s development in Nigeria. *Electronic Research Journal of Social Sciences and Humanities.* 2020; 2:126-135.
118. Muhammad F, Abdulkareem JH, Chowdhury AA. Major public health problems in Nigeria: a review. *South-East Asia Journal of Public Health.* 2017;7(1):6-11.
119. Adenomon MO, Maijamaa B. On the effects of COVID-19 outbreaks on the Nigerian Stock Exchange performance: Evidence from GARCH Models; 2020.
120. Palestinian Ministry of Health (PMoH); 2020.  
Available:<https://www.moh.gov.ps/portal/health-report/>
121. Palestinian Ministry of Higher Education and Scientific Research (PMoHE&SR). Reports; 2020.  
Available: <https://www.mohe.pna.ps/>
122. Palestine Monetary Authority (PMA). Economic Forecast Reports; 2020.  
Available:<http://www.pma.ps/Default.aspx?tabid=509&language=en-US>  
(Accessed: 16 January 2022).
123. UNCTAD. World investment report 2019: Special Economic Zones. United Nations Publications, New York; 2019.
124. Unicef. Impact of the economic crisis and food and fuel price volatility on children

- and women in the MENA region. ODI Working Papers 310; 2009.  
Available: <http://www.odi.org.uk/resources/details.asp?id=4422&title=economic-crisis-food-prices-fuel-children-women-en-mena>
125. United Nations Conference on Trade and Development (UNCTAD). UNCTAD World Development Report; 2007.  
Available: [www.unctad.org/wir-UNCTAD/WIR/2007](http://www.unctad.org/wir-UNCTAD/WIR/2007).  
(Accessed: 22 January 2022).
126. United Nations Conference on Trade and Development (UNCTAD). UNCTAD World Development Report; 2009.  
Available: <https://unctad.org/WorldInvestmentReport2009>  
(Accessed: 26 January 2022).
127. United Nations Conference on Trade and Development (UNCTAD), Policy Alternative for Sustained Palestinian Development and State Formation, Geneva; 2009.
128. World Bank. World Development Report 1985: International Capital and Economic Development. New York: World Bank; New York: Oxford University Press; 1985.
129. World Bank. World Development Report 1985. Washington, D.C. World Bank; 1985.  
(Accessed: 27 January 2022).
130. World Bank. Developing the Occupied Territories, vol. 2. Private Sector Development; 1994.
131. World Bank. World development indicators & global development finance; 2010.  
Available: <http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2010>  
(Accessed: 26 January 2022).
132. World Bank. World development indicators & global development finance; 2020.  
Available: <http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2020>  
(Accessed: 28 January 2022).
133. Worldometer. Coronavirus (COVID-19) Pandemic Update (Live) [Internet]; 2020. [Cited 2020 Apr 24].
134. Yazdi SK, Khanalizadeh B. The financial development and agriculture growth in Iran: ARDL approach. Recent advances in energy, environment and financial planning, ISBN: 978-960-474-400-8. 2013; 335–342.
135. Shaw E. Financial deepening in economic development. Oxford University Press, New York; 1973. Simwaka KT. Financial development and economic growth in Malawi: An empirical analysis. Banks and Bank Syst. 2012;7(3):85–96.
136. Slavin SL. Macroeconomics, ninth edition. 10020.: McGraw-Hill Companies, Inc, New York. 2009;390.
137. Smith MP. Economic development. Addison-Wesley, Boston; 2012.
138. Soininen J, Puumalainen K, Sjögrén H, Syrjä P. The impact of *the* global economic crisis on SMEs. Management Research Review; 2012.
139. Taha Z, Anis O, Hassen S. Banking intermediation and economic growth: Some evidence from MENA countries. Adv Manag Appl Econ. 2013;3(4):51–57.
140. Timsina N, Pradhan RS. Effects of bank lending on economic growth in Nepal. J Adv Acad Res. 2016; 3:53–75.
141. Transmission Dynamics of Novel Coronavirus (COVID-19) in Nigeria. International Journal of Environmental Research and Public Health. 17(9):3054.
142. UNCTAD. Foreign direct investment and performance requirements: New Evidence from selected countries. United Nations Publications, Switzerland; 2003.
143. UNCTAD. World investment report 2018: Investment and new Industrial policies. United Nations Publications, New York; 2018.

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