

## The Implications of the COVID-19 Pandemic on Oil Prices in the Middle East and North Africa Region: An Analytical Economic Study

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### **abstract:**

This This study aims to analyze the implications of the COVID-19 pandemic on oil prices in the Middle East and North Africa (MENA) region, with a focus on the dual shock experienced by the region's economies as a result of the pandemic outbreak on one hand, and the sharp collapse in global oil prices on the other. The study adopts an economic analytical approach based on both quantitative and qualitative data derived from international reports, with the objective of assessing the crisis's impact on national budgets, expenditure levels, and short- and medium-term economic growth prospects. The findings indicate that an effective response to this dual shock requires prioritizing actions over time—starting with addressing urgent health emergencies, followed by tackling the economic recession, while fiscal consolidation policies may be postponed until the recovery phase begins. The study also emphasizes the need to boost health spending, provide direct cash transfers to vulnerable groups, and support the private sector, especially small and medium-sized enterprises operating in the informal economy, as they represent a critical component in the recovery path and economic restructuring after the crisis.

**Keywords:** COVID-19 pandemic, oil prices, dual shock, economic crisis, OPEC+, MENA countries.

**Jel Classification Codes :** Q41, Q43, E32, F44, O53.

## I- Introduction :

Since the World Health Organization officially declared the outbreak of the novel coronavirus in January 2020—and confirmed it as a global pandemic in March of the same year—the world has witnessed an unprecedented crisis that has affected various economic and social sectors. Although the virus initially spread in China, specifically in the city of Wuhan in December 2019, its effects rapidly extended across the globe.

The Chinese government quickly implemented strict measures to contain the outbreak by imposing widespread lockdowns on cities and factories, suspending transportation, and widely adopting remote work practices. This led to a sharp decline in economic activity, with passenger traffic in China falling by 60% compared to normal levels, while New York City recorded a drop of over 90% in subway ridership in April 2020 (The World Bank, 2020).

This sudden contraction in global economic activity directly impacted oil demand levels, prompting energy experts to forecast a potential decline in global consumption by up to 25%. This created severe pressure on the global oil market, especially after the failure of the "OPEC+" meeting held in Vienna in March 2020 to reach an agreement on further production cuts. This failure triggered what became known as a "price war" between Saudi Arabia and Russia, after Saudi Arabia decided to increase its oil production and offer steep price discounts, while Russia refused to reduce its output in order to maintain its market share.

The International Energy Agency later warned of a 30% decline in global oil demand in 2020 due to the widespread shutdown of economic facilities and the halt of vital sectors such as travel, tourism, and entertainment. This situation led to a market surplus of approximately 25 million barrels per day, placing further downward pressure on global oil prices.

In this context, the importance of this study stems from the need to analyze the economic repercussions of the COVID-19 crisis on oil prices—particularly in the Middle East and North Africa (MENA) region, which relies heavily on oil revenues. Accordingly, the main research question posed by this study is: **What are the economic implications of the COVID-19 pandemic on oil prices in the Middle East and North Africa region?**

### **Previous Studies:**

• **Henri Kouam (2020):** *"Heterogeneity of COVID-19 effect and implications for global commodity prices in the medium-term"*

This study aimed to analyze the impact of the COVID-19 pandemic on risky assets, with a particular focus on the commodities sector, especially oil. The results showed that the pandemic's repercussions extended to the industrial sector in advanced economies, leading to a significant decline in production during the early months of the crisis.

The study discussed the possibility of oil prices rebounding in the medium term, supported by production cut agreements between OPEC and Russia, as well as a temporary recovery in China, which helped stabilize the lower bound of oil futures prices. It also noted that Brent crude approached the \$56-per-barrel mark, distancing itself from previously low levels.

The study recommended that the countries of the Central African Economic and Monetary Community conduct trade settlements in local currencies and enhance physical and digital infrastructure to reduce structural barriers, thereby supporting long-term sustainable economic growth. (Henri, 2020).

• **Hela Mzoughi et al. (2020):** *"The Effects of COVID-19 Pandemic on Oil Prices, CO<sub>2</sub> Emissions and the Stock Market: Evidence from a VAR Model"*

This study aimed to analyze the impact of the COVID-19 pandemic on oil prices, carbon dioxide emissions, and stock market volatility during the period from January 22 to March 30,

2020. The researchers used an Unrestricted VAR model to estimate the relationships among these variables. (Hela et al., 2020).

The results showed that the rise in COVID-19 cases led to a decline in crude oil prices, though this effect was short-lived. In contrast, the response of economic activity, measured through CO<sub>2</sub> emissions, was negative throughout the forecast period, indicating a sustained pandemic impact on economic activity. It also revealed that stock market volatility was more strongly affected by the COVID-19 situation than were crude oil prices or CO<sub>2</sub> emissions. The study found that the variance share of forecast errors in CO<sub>2</sub> emissions was greater than those in energy and stock markets.

Based on these findings, the study recommended economic intervention to accelerate recovery and strengthen investor confidence in long-term growth.

• **Arshian Sharif et al. (2020):** *"COVID-19 Pandemic, Oil Prices, Stock Market, Geopolitical Risk and Policy Uncertainty"*

This study addressed the relationship between the COVID-19 outbreak and fluctuations in oil prices and stock markets, in addition to geopolitical risk and economic policy uncertainty in the United States. It employed a wavelet-based approach that allows for understanding the interconnection between variables across different time frequencies.

The study, based on daily data, found an unprecedented impact of the pandemic and oil price shocks on levels of political and economic uncertainty and stock market volatility—particularly in low-frequency bands (i.e., long-term effects).

It also revealed that the impact of the pandemic on geopolitical risks was significantly greater than its impact on U.S. economic policy uncertainty.

The study concluded with several recommendations for policymakers and asset managers, especially concerning the management of economic and financial crises during periods of instability. (Sharif et al., 2020).

• **Donia Aloui et al. (2020):** *"COVID-19's Impact on Crude Oil and Natural Gas S&P GS Indexes"*

This study examined the impact of the COVID-19 pandemic on crude oil and natural gas price indexes, particularly the Goldman Sachs energy commodity indexes (S&P GS Indexes). The results indicated that on March 12, 2020, the price of U.S. crude oil sharply dropped to around \$30 per barrel. This was attributed to two main factors: the rapid spread of the coronavirus and OPEC's failure to reach an agreement on production quotas.

The study employed a Time-Varying Parameter Structural VAR model with stochastic volatility (TVP-SVAR), developed by Primiceri (2005), to analyze how energy futures markets responded to COVID-19 shocks.

The findings showed that energy price indexes responded flexibly to these shocks, being affected not only by fundamental factors such as supply and demand but also by behavioral and psychological factors among investors—highlighting the complexity of market-pandemic interactions. (Donia et al., 2020).

### **I. Price Collapse:**

In recent years, crude oil prices have experienced wide fluctuations due to several factors, including geopolitical developments, changes in the global economy, and technological advancements in exploration and production (Carmichael et al., 2007). However, Monday, April 20, 2020, marked an unprecedented event in the history of the oil industry, as West Texas Intermediate (WTI)—the U.S. benchmark crude—collapsed by over 300% in a single trading session, settling at -\$37 per barrel (Reuters, 2020).

This historic collapse, dubbed the “Black Monday” of oil, sent shockwaves through global markets, leaving psychological and economic effects stretching from the United States to Europe and Asia—including the MENA region. The crisis was deepened by the limited storage capacity in

the U.S. and high storage costs, which made it cheaper for producers to pay buyers to accept oil deliveries.

This situation became especially clear in the May delivery contracts, where traders rushed to offload positions to avoid the high costs of transportation and storage. Bloomberg described this unprecedented drop as “the worst crisis to hit the oil market in decades,” noting that the plunge into negative pricing dealt a massive shock to the economies of the Middle East and North Africa—one that defies interpretation within traditional economic frameworks (Javier & Will, 2020).

Before delving into the economic implications for MENA countries, it is essential to understand the dynamics and underlying causes of this collapse in the context of the COVID-19 pandemic.

### **2.1. Oil Price Scenarios Amid the Saudi-Russian Price War and the Post-COVID-19 Period:**

The price war between Saudi Arabia and Russia, which erupted in March 2020, is considered one of the most prominent events that exacerbated the crisis in oil markets in parallel with the COVID-19 pandemic. While it is difficult to determine whether this conflict was a direct reaction to the global health crisis or the result of pre-existing disagreements over production policies, available evidence points to structural tensions that predated the pandemic.

Since late summer 2019, clear signals emerged from the Russian side reflecting its reluctance to extend the OPEC+-sponsored production cut agreement. This hesitation stemmed from the declining market share of Russian oil in the global energy market, particularly under U.S. sanctions imposed on Russia's oil and gas sectors. These pressures pushed Russian policymakers to adopt a more conservative production strategy focused on maintaining output levels to protect the domestic market and avoid further concessions.

Estimates suggest that continuing this strategy—without increasing production—will gradually raise the share of domestic consumption within total Russian oil output. According to the data presented (see Figure 01), the domestic consumption share is projected to reach 30% of total Russian oil production by 2024 if current production levels persist.

Such a scenario would weaken Russia's capacity to generate substantial cash flows from oil exports, providing a strategic motive for rejecting the deep production cut proposals led by Saudi Arabia at the onset of the pandemic.

In this context, the price war emerges not merely as a reaction to COVID-19 but as part of a broader reconfiguration of power dynamics within global energy markets.

Figure 01 also reflects the evolution of crude oil production and consumption in Russia during the period 2010–2024. It is evident from the chart that domestic consumption has been gradually increasing, while production levels have remained relatively stable in recent years. This upward trend in internal consumption threatens to reduce the exportable surplus, which could result in Russia losing part of its market share in the medium term unless it revises its production policies.

This trend coincided with Russia's cautious stance toward extending the OPEC+ production cut agreement—especially considering the presence of a comfortable fiscal buffer, which allowed Russia to lower the breakeven oil price in its budget from \$70 per barrel to a range between \$45 and \$50 (Sharafedin & Shadia, 2020). This gave Russia some maneuvering room to face crises without the need for substantial investment incentives.

In contrast, Saudi Arabia adopted a long-term strategic vision aimed at preserving its future market position. It responded to Russia's rigidity with a preemptive move: additional price cuts, implicitly signaling its readiness to enter a price war should Moscow refuse to commit to production reductions.

These interactions demonstrate that the oil market is not governed by economic factors alone; political and strategic calculations also play a pivotal role. Saudi Arabia was betting that the global health crisis would force Russia back to the negotiating table—a scenario that did not materialize, exacerbating the crisis and triggering a sharp price collapse in the spring of 2020.

In the attached chart (see Figure 02 below), futures market data from both the London and New York exchanges show the back end of the oil futures curve stabilized above \$50 per barrel. The London market extends its forecast horizon to 2024, while the New York market projects prices through 2028. This stabilization is not random—it reflects the marginal cost level of U.S. shale oil production, estimated on average at around \$50 per barrel (Sachs, 2020). On this basis, \$50 can be considered a floor price that separates market stability from disequilibrium. If the price drops below this threshold, it signals a structural imbalance in the supply-demand equation—typically tilted toward excess supply.

In such a scenario, the economic viability of shale oil extraction becomes questionable, leading many producers to temporarily exit the market. This could potentially trigger a supply crisis if this exit is not compensated for by alternative sources of production.

Futures market data (as shown in Figure 03 below) reveal a notable shift in the structure of the oil price curve following the OPEC meeting in March 2020. An unusual widening occurred between near-term and longer-term futures prices—a phenomenon known in oil market literature as "Contango."

Under normal circumstances, this phenomenon reflects storage costs and financing rates and is typically confined within acceptable margins (Naimat, 2010). For instance, prior to the meeting, the price spread between the May 2020 contract and the March 2021 contract did not exceed \$0.26 per barrel—a logical level consistent with classical equilibrium models.

However, following the meeting, this spread sharply increased to \$6.00 per barrel, a level considered imbalanced and indicative of market distortions. This steep contango led analysts to predict a gradual return to equilibrium within one year, assuming that the spread would not exceed \$2.00 per barrel.

Once the near-term price dropped to \$32 per barrel, while the longer-term futures price exceeded \$48, it became clear that the gap needed to be narrowed. Since the tail-end of the futures curve stabilized at \$50, the only path for market adjustment was for spot prices to rise—which indeed occurred, with prices climbing to around \$36 per barrel.

In the London Exchange, the contango level reached \$3.50 per barrel, indicating that the gap persisted but had begun to narrow gradually. This trend supported expectations of further upward adjustments in near-term prices—provided the futures curve continued to anchor above the \$50 threshold.

Despite the significant volatility experienced in energy markets following the COVID-19 pandemic and the OPEC+ meeting crisis, indicators derived from the oil options market suggest there was some—albeit limited—potential for price stabilization (hedging) within an approximate range.

According to market estimates at the time, it was theoretically possible—through direct hedging using options contracts—to lock in a barrel price of around \$39 for the period from May 2020 to December 2021.

However, this possibility was contingent on prevailing market conditions, which were marked by high volatility, making it difficult to accurately forecast a fixed price for the entire year. Still, partial hedging tools were available for short- to medium-term risk management.

## **2.2. The Price War Between Russia, Saudi Arabia, and U.S. Shale Oil Producers**

While the oil price war triggered by the collapse of the OPEC+ agreement in March 2020 may appear to be a conventional conflict between Saudi Arabia and Russia, in reality, it reflects a complex triangular interplay that also involves U.S. shale oil producers, who have become a major force in shaping global market dynamics since the onset of the American oil boom.

Brent crude oil dropped to \$33.20 per barrel by the end of trading on Friday, while futures prices on the far end of the curve remained relatively stable around \$50 per barrel, thereby

providing a form of structural support to near-term prices and preventing a full collapse below the \$30 per barrel threshold.

In this context, it is essential to understand the structural pressures facing Russia, particularly the high ratio of operating expenses to capital expenditures. According to data from the American Petroleum Institute (2020), this ratio is estimated at 200% in Russia, compared to 68% in the U.S. and 69% in Saudi Arabia, indicating an inefficiency in production systems (see Figure 04 below).

To explain this economically, one could use the analogy of vehicle maintenance: the higher the capital expenses (e.g., full engine servicing), the lower the subsequent operating costs (e.g., fuel and oil)—and vice versa. In Russia, chronically high operating expenses suggest a less efficient production system, which in turn discourages investors and erodes long-term capital accumulation.

Global energy companies typically seek stable investment environments with low operational risks. However, in Russia, most oil revenues are channeled into government spending instead of being reinvested in the sector, which diminishes the market's attractiveness. Consequently, Russia seeks to free itself from the constraints of OPEC+ in order to increase output and regain investor interest through a liberalized production policy—explaining a key aspect of its firm stance during the crisis.

Figure 05 below presents an estimate of the annual oil and gas profits expected for the world's three largest oil producers (United States, Russia, and Saudi Arabia) under three oil price scenarios: \$60, \$40, and \$30 per barrel.

The results suggest that all producers can withstand prices above \$30 per barrel, despite relative losses caused by the price war. However, the critical turning point occurs when prices fall below \$32 per barrel, pushing U.S. shale oil producers into the loss zone, where production costs exceed revenues.

Annual losses for shale producers are estimated at around \$9 billion if the average price stabilizes at \$30 per barrel, making this price point the last line of defense for the U.S. to preserve the economic viability of its shale oil sector.

This situation underscores the structural differences in cost frameworks:

- Saudi Arabia and Russia can tolerate low prices for longer periods due to their low marginal costs.
- The United States, by contrast, relies on higher prices to ensure the sustainability of its shale oil industry.

The figure above illustrates that the U.S. shale oil industry enjoys a high capacity for reducing operating costs, thanks to advancements in technology and management—granting it a competitive flexibility compared to Saudi Arabia and Russia.

Although the United States relies more heavily on natural gas within its hydrocarbon mix, its ability to endure a prolonged price war remains relatively higher.

Estimates suggest that Saudi Arabia may bear the largest loss in weighted production price, with a drop of approximately \$23 per barrel, compared to \$14.38 for Russia and \$9.59 for the U.S. (Tom, 2009).

This indicates that the time window for Saudi Arabia to achieve its objectives in pressuring competitors is limited and requires quick results before the consequences of low prices backfire.

## **II. The Impact of the COVID-19 Pandemic on MENA Economies:**

The outbreak of the novel coronavirus—first reported by Chinese authorities on December 31, 2019—spread rapidly worldwide. By March 22, 2020, the virus had infected over 300,000 people, caused more than 13,000 deaths, and recorded over 90,000 recoveries.

Iran emerged as the first epicenter of the pandemic in the Middle East and North Africa (MENA) region, with over 20,000 confirmed cases and 1,500 deaths by March 6, 2020, severely

affecting production and trade. The virus quickly spread to neighboring countries, with 511 cases in Saudi Arabia, 481 in Qatar, 332 in Bahrain, 233 in Iraq, and 153 in the UAE as of March 22, 2020.

Although most healthcare systems in the region are rated by the World Health Organization (WHO) as having medium to good efficiency—excluding Yemen and Djibouti—lack of transparency and weak information exchange posed major challenges in managing the crisis and could lead to severe consequences if not addressed seriously (Hamza, 2020).

Despite relative healthcare efficiency in some countries, MENA nations face significant risks due to poor data transparency and information flow, which may result in serious failures in crisis management.

The pandemic's impact is not confined to the health sector alone but has triggered a dual shock to regional economies:

- Supply shock: due to labor shortages from illness or lockdowns, and disrupted supply chains due to suspended transportation and production.
- Demand shock: stemming from falling global demand for the region's exports—particularly oil and tourism.

While the slowdown in China may not drastically affect regional tourism, the spread of the virus in Europe and the imposition of strict global health measures will likely have more severe effects on economic activity in MENA (Ahmed, 2020). See the attached graph (Figure 07 below).

It is expected that the spread of the virus in other countries, especially in Europe, and the preventive health measures taken worldwide will have a greater impact on MENA economies.

In addition to the health shock, the COVID-19 pandemic caused a dual regional contraction on both the supply and demand sides, due to halted commercial activity and a sharp decline in travel. The uncertainty surrounding the evolution of the pandemic contributed to reduced levels of investment and consumption, while the steep collapse in oil prices led to additional weakening of demand, especially in countries heavily reliant on energy revenues.

These shocks are expected to be severe but short-lived, with a gradual recovery in supply and demand depending on the duration and intensity of the crisis.

The situation was further complicated by the failure of the OPEC+ negotiations in March 2020, as Russia's rejection of the proposed production cuts prompted a strong response from Saudi Arabia, which increased its production to its maximum capacity of 12.3 million barrels/day and offered substantial price discounts. As a result, prices dropped by more than 30% within days, with West Texas Intermediate falling to \$22.39 per barrel on March 20.

Market forecasts (futures curve) indicate that the recovery will be slow, with prices not expected to exceed \$40 per barrel before the end of 2022. See the chart below:

### **3.1. The Dual Shock on MENA Countries:**

MENA countries are facing a dual shock: the outbreak of COVID-19 and the collapse in oil prices—two interconnected but fundamentally different crises. On one hand, the demand shock in oil markets stems from a sharp global decline in consumption due to precautionary measures such as city lockdowns and travel restrictions, which caused a broad economic paralysis.

According to Rystad Energy, global oil consumption declined by approximately 10% compared to 2019—equivalent to 10 million barrels per day—mainly due to sharp reductions in air, land, and maritime travel (Vivian et al., 2020).

Although there is uncertainty about the duration and depth of the pandemic-related shock, projections suggest it is relatively short-term. However, its intensity has prompted governments in both developed and developing countries to adopt unprecedented emergency measures, with hopes resting on effective global coordination to overcome the crisis.

The impact of falling oil prices varies across MENA countries, depending on their energy profiles. Oil-importing countries benefit from the price decline, whereas oil-exporting countries are directly harmed.

A simplified method for assessing this impact is to multiply a country's net oil exports as a percentage of GDP by the percentage decline in oil prices.

For example, based on a hypothetical scenario in which oil prices fall by 48% compared to 2019:

- Kuwait, where net oil exports account for 43% of GDP, would experience a 20% decline in real income.
- Conversely, Morocco, as a net oil importer, would benefit from a 3% increase in real income due to a lower import bill.

This example highlights the significant disparities among the region's economies and underscores the need to adapt fiscal policies to each country's position in the energy value chain.

However, in the Middle East and North Africa (MENA) region, the impact of falling oil prices is **not limited to oil-exporting countries**, but also affects **importers** through **indirect channels** such as declining remittances, reduced foreign direct investment, shrinking tourism revenues, and decreased financial aid from Gulf countries (Richard & Beatrice).

While the **Gulf Cooperation Council (GCC)** countries still possess **financial surpluses** that can be used to cushion the shock, other oil exporters like **Algeria and Iran** are experiencing an **erosion of their foreign reserves**, pushing them toward greater reliance on **exchange rate flexibility**, alongside the urgent need to **accelerate private sector reforms** and **diversify their economies**.

For oil-importing countries such as **Lebanon, Jordan, and Egypt**, the economic recession is likely to **exacerbate already high public debt levels**, thereby weakening their ability to confront both the **financial and health crises** simultaneously.

### 3.2. Economic Impacts of the Crisis in the Maghreb Region:

The COVID-19 crisis and the collapse in oil prices have led to varied economic consequences across the Maghreb region. With travel restrictions still in place, Morocco and Tunisia are expected to be severely affected due to their economies' reliance on the tourism sector, while Algeria and Libya will suffer from declining hydrocarbon export revenues.

Moreover, trade disruptions with China are expected to negatively impact Algeria, Tunisia, and Morocco, while a slowdown in the European market—particularly significant for Morocco, the EU's largest trade partner in the region—will further strain the economic landscape.

In Algeria, oil exports account for about 93% of foreign currency income. The oil price collapse has driven foreign exchange reserves down from \$194 billion in 2013 to approximately \$32 billion by the end of 2019. The government has resorted to postponing certain state-funded projects as part of its financial adjustment efforts.

Despite these challenges, Algeria's impact has been less severe than in some other countries, thanks to the agricultural sector, which covers 80% of the country's food needs, thereby helping to reduce the import bill (Souhail & Abeer, 2020).

Tunisia, on the other hand, is among the best-equipped Maghreb countries in terms of healthcare infrastructure, benefiting from a more advanced healthcare system compared to its neighbors Algeria and Morocco. The spread of the virus was also relatively slower. Tunisia secured \$400 million in financial support from the International Monetary Fund (IMF) and its government pledged an additional \$850 million to address the crisis's repercussions. Despite these measures, Tunisia's economic outlook remains bleak, with the country expected to enter recession, particularly due to the heavy impact on the tourism sector, which is one of the pillars of the national economy.

As for Libya, despite recording only one confirmed case early in the pandemic, the overall situation is alarming due to the ongoing armed conflict, the fragile healthcare infrastructure, and the lack of effective control by the internationally recognized government over the entire country. If the virus were to spread widely, the consequences could be catastrophic, given the limited resources and difficulty in implementing public health measures.

### **III. Analysis of Results**

#### **4.1. Pandemic Impact on the Economic and Social Structure**

The findings show that the COVID-19 pandemic caused a sharp supply-side shock, accompanied by rising unemployment and poverty rates, particularly in light of the fragility of social safety nets. The crisis also led to decreased liquidity in the financial system and threatened the survival of many businesses and households—especially within the informal sector, which constitutes the largest share of economic activity in several countries across the region.

This situation coincided with waves of social unrest that had preceded the pandemic, further complicating the political and economic landscape in some countries (e.g., Algeria, Lebanon, and Iraq), where citizens were calling for institutional reforms—revealing a deep intersection between the health shock and the pre-existing political context.

#### **4.2. Impact of Oil Price Collapse on Macroeconomic Balances**

Data indicate that the sudden drop in oil prices contributed to:

- A decline in export revenues in rentier states.
- A shrinkage of government income, especially in countries highly dependent on hydrocarbon revenues (e.g., Algeria, Iraq, Libya).
- A worsening of the twin deficits (fiscal deficit and current account deficit).
- Increased financial risk and higher external borrowing costs, especially due to rising sovereign bond insurance premiums.

Meanwhile, oil-importing countries, although they initially benefited from lower prices, were severely affected by falling remittances, declining tourism revenues, and weakening foreign direct investment.

#### **4.3. Proposed Responses to the Dual Shock**

– Immediate Health Response:

- Mobilize financial resources toward the health sector (wages, equipment, vaccination campaigns).
- Target informal sector workers with direct cash transfers.
- Ensure free flow of health information and enhance transparency to strengthen community response.

– Fiscal and Monetary Policies:

- Postpone fiscal reforms related to oil price declines and focus on protecting vulnerable groups.
- Use monetary easing tools such as:
  - Lowering interest rates.
  - Injecting liquidity.
  - Resorting to “helicopter money” where inflationary pressures are low.
- Take into account the limited applicability of such tools in fixed exchange rate regimes.

– External Financing and International Support:

- There is an urgent need for international assistance from institutions such as:
  - The International Monetary Fund (IMF)
  - The World Bank
  - Regional funds (e.g., the Arab Monetary Fund)

- Priority should be given to countries with depleted reserves or those unable to access international capital markets.

#### 4.4. Complementary Field Insights

Field data show that institutional resilience and governance quality are decisive factors in determining a country's capacity to absorb the shock.

Countries that adopted proactive approaches in health and social support (e.g., Tunisia, to some extent) managed to soften the impact, whereas those with internal conflict or weak institutions (e.g., Libya and Yemen) proved to be the most vulnerable.

#### IV. Conclusion:

In light of the analysis of the dual shock caused by the COVID-19 pandemic and the collapse in oil prices, it is evident that the MENA region stands at a critical crossroads, where health, economic, and social crises converge in a rare moment of structural fragility.

Although oil will remain a key energy source for decades to come, the extreme volatility of its prices, as witnessed during the 2020 crisis, underscores the fragility of rentier economies dependent on energy exports. The pandemic exposed the risks of overreliance on a single sector, resulting in sharp revenue drops, worsening fiscal and current account deficits, and threatening social stability, particularly in countries lacking effective economic diversification.

The pandemic also delivered strong supply and demand shocks, leading to increased poverty and unemployment—especially given the collapse of the informal sector and the absence of adequate social safety nets. Households and small and medium enterprises were the primary victims, amid liquidity shortages and insufficient governmental response mechanisms.

In this context, policymakers must design targeted, phased responses according to priorities—beginning with health emergencies and ending with the restoration of financial stability through flexible fiscal and monetary tools, including the use of helicopter money when necessary, while considering inflationary risks and exchange rate constraints.

The analysis also revealed that the impact was not uniform across the region:

- Oil-exporting countries like Algeria and Iraq suffered rapid reserve depletion and external financing difficulties.
- Oil-importing countries like Morocco, Egypt, and Tunisia, although benefiting from lower prices, were hit by falling remittances, tourism, and foreign investment.
- Libya, Syria, and Yemen topped the list of fragile states, where conflict amplified the pandemic's effects, warning of a potential humanitarian catastrophe.

Furthermore, the situation in refugee camps represents one of the gravest aspects of the crisis, where hundreds of thousands live in precarious health conditions, with minimal services. A virus outbreak in these settings could produce catastrophic transboundary consequences that cannot be locally contained.

In conclusion, the COVID-19 pandemic was not merely a passing health crisis; rather, it exposed and accelerated the structural crises of the region. Without strong national responses, supported by urgent international aid, the pandemic may become one of the most severe regional crises since the 2011 uprisings, or even since the emergence of ISIS in 2014. Haut du formulaire  
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**-Appendices :**

**Figure 01: Russia's Oil Production and Consumption Share (Thousand Barrels per Day)**

**Source:** Author's illustration based on estimated data extracted from original Arabic chart on Russian oil production and consumption (2010–2024), for academic purposes.

**Figure 02: Brent Futures Price in the New York Market, March 2020**

**Source:** Author's reconstruction based on oil futures price data from the London and New York markets, comparing price curves before and after the OPEC meeting in March 2020. Data interpreted from Arabic chart for academic use.

**Figure 03: "Contango from Historical Trend to March 2020"**

**Source:** Author's reconstruction based on Brent crude oil futures data from the London market, interpreted from original Arabic chart (as of March 2020), for academic illustration purposes.

**Figure 04: Operating vs. Capital Expenditures in Major Oil-Producing Countries**

**Source:** Author's elaboration based on comparative oil sector expenditure and production data derived from an Arabic-language chart, using figures referenced by the American Petroleum Institute (2020), for academic illustration purposes.

**Figure 05: Oil and Gas Profit Forecasts Under Price War Scenarios (Billion USD per Year)**

**Source:** Author's reconstruction based on estimated oil and gas profit projections under various price scenarios (\$60, \$40, \$30 per barrel) for the United States, Russia, and Saudi Arabia. Data interpreted from and Arabic-language chart for academic purposes.

**Figure 06: Estimated Impact of the Decline in China's Per Capita GDP on Chinese Travel to MENA and the Rest of the World**

**Source:** Author's reconstruction based on estimated data from: Ahmed, A. (2020). Economic and Tourism Impacts of COVID-19 in the MENA Region. Cairo: Regional Policy Studies Institute, p. 45.

**Figure 07: " Spot Price and Brent Crude Price Forecasts "**

**Source:** Author's reconstruction based on Brent crude oil futures data as presented in: Ahmed, A. (2020). Economic Impacts of COVID-19 and Oil Price Shocks in the MENA Region. Cairo: Regional Policy Studies Institute, p. 52.

**Figure 08: Impact of the Oil Price Collapse on Initial Estimates**

**Source:** Author's reconstruction based on: International Monetary Fund (IMF). (2020). Regional Economic Outlook: Middle East and Central Asia. Washington, DC: IMF Publications, p. 28.

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