YEMEN

The key economic incentives of peace

EXECUTIVE SUMMARY

At the beginning of April 2022, the Internationally Recognized Government of Yemen (IRG), the de-facto authority (DFA) in the north of Yemen (also known as the Houthis), and the Saudiled coalition agreed to a two-month truce. While no political solution is likely to find universal approval among conflict actors, this report provides an overview of the economic incentives that can be used to generate consensus among warring parties and other stakeholders and the expected humanitarian gains.

A permanent halt to war hostilities, restored fuel imports through Al Hodeidah and access to Sana'a International Airport, the removal of inland custom duties, and a renewed coordination of economic and monetary policies could generate significant incentives for the parties to accept peace over conflict. These actions are expected to have a positive impact on a multitude of economic activities and consequently on the overall humanitarian situation. The production and export of hydrocarbons, including oil and gas, have suffered from significant setbacks since 2015. The activation of production blocks and the increase of exports could generate additional revenues that, while more limited than before, could be managed between several warring parties and stakeholders. Such a setup could help address the balance of payments and reduce the currently widening financing gap. The report also highlights the window of opportunity currently presented by the high price of liquefied natural gas (LNG) on the international market and the gap created by the desire of some LNG importers to explore alternatives to Russian gas. The economic benefits following the resumption of LNG production and export operations may produce positive impacts on the peace process upon the establishment of a mutually acceptable LNG revenue mechanism. These benefits would then serve as a significant confidence-building measure.

Private sector activity could also benefit from greater access to international financial markets and technical equipment. Reconstruction activities likely to take place after a peace agreement would boost employment, improving people's access to livelihoods and increasing their ability to provide for their needs. The availability of solar- and fuel-powered water pumps in the market, further improvements in agricultural practices, and improved access to farmland could also increase local food production. The lifting of restrictions would reduce the costs sustained by farmers. At the same time, greater access to international financial markets could help restore confidence in Yemeni banks currently burdened by the de-risking

measures of foreign banks. Finally, the dismantling of inland customs checkpoints would likely reduce the price of commodities for the population while generating new economic opportunities and eventually cancelling out the benefits linked to the wartime economy.

There are undoubtedly huge challenges that would need to be overcome in searching for sustained peace and unlocking some of its major economic benefits as outlined in this report. For example, the possibility of potential spoilers undermining peace prospects would remain. These challenges are, however, beyond the scope of this paper. Instead, this report focuses on the positive implications of peace through an economic lens. It highlights a number of points that could incentivise the main warring parties to view peace as a credible, viable, and even attractive option.

Methodology

This report is based on the following:

- secondary data review of literature on Yemen's economy prior to and during the conflict, together with literature on the development of political relations and negotiations
- · data analysis and desk review of Yemen's preconflict export capacity and agricultural production
- interviews with six experts working within the public, private, and financial sectors in Yemen and officials that work for international institutions currently operating in Yemen.

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RECENT KEY DEVELOPMENTS

On 1 April 2022, the UN Special Envoy for Yemen Hans Grundberg announced that the main warring parties had agreed to a two-month truce starting 2 April, to last until 2 June 2022. The declared truce followed the unilateral ceasefires that the DFA and the Saudi-led coalition announced a few days before. The truce includes a halt to air, ground, and maritime hostilities within Yemen and across borders. Other key components include permitting 18 fuel vessels to enter and unload at Al Hodeidah port during the initial two-month truce and authorising two commercial flights per week between Sana'a and regional capitals (such as Cairo and Amman). The parties also agreed to discuss the easing of movement restrictions in Taiz. The current truce may extend beyond the initial two-month period (OSESGY 01/04/2022).

Following the announcement of the nationwide truce, on 7 April, President Abdrabbuh Mansur Hadi declared he had delegated his powers to a Presidential Council immediately after dismissing Vice President Ali Mohsen Al Ahmar. The Council comprises eight members, includina:

- Rashad Al Alimi, former Minister of Interior appointed as the Council leader
- Aidarous Al Zubaidi, leader of the separatist Southern Transitional Council
- Abu Zara'a Al Muharrami, leader of the Giant Brigades
- Tariq Mohammed Saleh, commander of the National Resistance Forces
- Sultan Ali Al Arada, governor of Marib governorate and tribal leader
- Faraj Salmin Al Bahsani, governor of Hadramawt governorate and commander of the second military region
- Abdullah Al Alimi Bawazeer, former director of the Office of the Presidency
- Othman Hussein Mejally, former Minister of Agriculture and tribal leader (ISPI 22/04/2022; ICG 08/04/2022; Yemen Future 07/04/2022).

Saudi Arabia and the United Arab Emirates pledged USD 1 billion each for the Central Bank of Yemen (CBY) in Aden. Saudi Arabia pledged another USD 1 billion financial support package to the IRG that the Council currently heads. The additional support from Riyadh will be divided between providing fuel and development aid (Bloomberg 07/04/2022).

Immediate impact

Civilian casualties and displacement

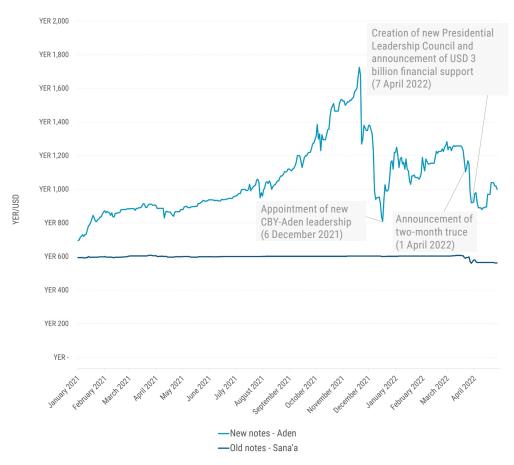
Despite evidence of violations, the ceasefire was largely holding as at the beginning of May. While violence, especially along frontlines, had not ceased completely, the type and impact of violent incidents had shifted. There were no air strikes reported, although several drone strikes, shelling, and landmines were responsible for reported casualties. Following the implementation of the truce, civilian casualties decreased from a weekly average of 193 casualties in the four weeks before the truce (3-30 March) to a weekly average of 102 casualties between 31 March and 27 April (CIMP 03/2022 and 04/2022). As at mid-April, the number of casualties had started an upward trend. Casualties were mostly the result of shooting incidents from dispute-driven violence and sniper fire, while others were from remnant explosives. The most affected locations (in terms of the number of incidents and related casualties) in April were Al Hodeidah, Al Jawf, Sadah, and Taiz (CIMP 04/2022). While Marib has not reported a high number of civilian casualties, violence has continued around the governorate, with reports of military activities violating the ceasefire (OSESGY 06/04/2022). Both the IRG and DFA have exchanged accusations of breaching the truce.

The number of new instances of displacement has been steadily declining since the beginning of the year. As at April, the weekly number of displaced households had further decreased from an average of 202 in March to 140 households between 3-23 April (IOM 25/04/2022).

Exchange rate and prices of commodities

The announcement of the truce, the establishment of the Council, and the USD 2 billion set to be allocated to CBY-Aden have had positive impacts on the exchange rate in both IRG and DFA areas, although the gains diminished once the initial exchange rate volatility recorded on 7 April subsided (Sana'a Center 07/04/2022). In IRG areas, the value of the rial reached YER 885 to USD 1 on 8 April, from a monthly average of YER 1,247 to USD 1 in March. The rial in DFA areas (the old banknotes) also slightly appreciated, reaching YER 554 to USD 1 after averaging around YER 600 to USD 1 since January 2020. The appreciation occurred after the DFA imposed a ban on the circulation of new rial banknotes (printed and issued by CBY-Aden after 2016) in DFA areas – a decision that resulted in the fragmentation of the rial (YET) accessed 19/04/2022).

Figure 1. YER/USD exchange rate (January 2021 to April 2022)



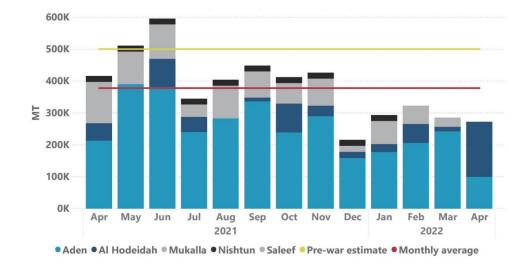
Source: YETI (accessed 12/05/2022)

While there is a clear correlation between the depreciation of the rial and higher food prices, previous periods of appreciation of the currency have not resulted in lower food prices. This outcome is likely related to the risk associated with the volatility of the rial, with traders struggling to adjust prices to account for purchases made at less favourable exchange rates or recoup losses from previous periods of rapid depreciation (ACAPS and Mercy Corps 16/12/2020; Sana'a Center 08/12/2018). Because Yemen imports 90% of its staple food demand, global market dynamics affect the prices of commodities in Yemen. As food and fuel prices continue to increase on the global market, even more so after the start of the war in Ukraine. prices in Yemen are expected to remain high in the foreseeable future.

Fuel imports and prices

As part of the two-month UN-brokered truce that began on 2 April 2022, the IRG had to authorise the entry of 18 fuel shipments via Al Hodeidah port in April-May. As at 30 April, a total of seven shipments carrying a total of 202,926 metric tons (MT) - including three gasoline shipments, three gasoil (diesel) shipments, and one fuel oil shipment - had been imported through Al Hodeidah port.

Figure 2. Fuel import trends in Yemen between April 2021 and April 2022



Source: YETI (accessed 12/05/2022)

The arrival of the fuel shipments in April 2022 marked an easing of the disruption to commercial fuel imports via Al Hodeidah since January 2021. With it came the expectation that fuel prices in DFA areas would decrease and there would be a greater availability of fuel at DFA-run Yemen Petroleum Company (YPC) fuel stations (and YPC agents) and privately owned stations.

Following the start of the truce, the price of petrol (gasoline) in Sana'a decreased from YER 26,000 to YER 16,000 per 20 litres from 4 to 9 April and then decreased further to YER 12,000 by 25 April (KIIs; Bogash 11/04/2022). These prices apply at YPC-run stations and agents on the one hand and privately owned stations on the other, meaning that there is currently no apparent divergence between the 'official' price and the 'commercial rate' of petrol in DFA areas. The cost of diesel in Sana'a also decreased from YER 28,000 at the end of March

to YER 19,000 during the first half of April and decreased further to YER 14,000 per 20 litres at the beginning of May (KIIs; Bogash 25/04/2022). The price of diesel in Sana'a is the 'commercial rate', with diesel only sold at privately owned stations. There was no diesel sold at YPC stations or agents as at the beginning of May 2022.

Table 1. Fuel prices in Yemen on 25 April 2022 (in YER and USD per 20 litres)

LOCATION	PETROL (20 LITRES)	DIESEL (20 LITRES)
Sana'a	YER 12,000 (USD 21.2)	YER 17,600 (USD 31)
Aden	YER 18,400 (USD 17.7)	YER 19,200 (USD 18.5)
Marib	YER 3,800 (USD 3.6)	YER 23,000 (USD 22)
Taiz	YER 24,000 (USD 23)	YER 26,000 (USD 25)
Mukalla	YER 20,000 (USD 19)	YER 21,000 (USD 20)
Seyoun	YER 22,000 (USD 21)	YER 21,000 (USD 20)

Sources: Bogash (25/04/2022); YETI (accessed 10/05/2022)

Notes:

- The exchange rate for new rial banknotes (used in IRG governorates) on 25 April was YER 1,040 to USD 1, while the exchange rate for old rial banknotes (used in DFA areas) was YER 565 to USD 1. Prices in USD for Marib, Mukalla, Seyoun, and Taiz were calculated using the same exchange rate reported in Aden, despite a degree of variation among exchange rates in governorates under IRG control.
- Unless otherwise stated, petrol and diesel are imported and not produced locally.
- The price of petrol in Marib is lower than elsewhere in Yemen as it is sourced locally from Block 18 and the Marib Refinery.
- The price of diesel in Marib is a 'commercial rate', seemingly suggesting that it reflects the price of imported diesel sold at privately owned stations versus that locally sourced from Block-18 and the Marib refinery.

As noted in the ACAPS report "Al Hodeidah fuel import and fuel price modelling" published on 4 April 2022, the price of fuel in DFA areas may further decrease as the market adjusts to the resumption of increased volumes of fuel imported via Al Hodeidah port (ACAPS 04/04/2022). A lot will depend on whether the easing of the disruption to commercial fuel imports via Al Hodeidah is temporary and limited to the 18 shipments earmarked for April and May as part of the current truce or commercial fuel imports will continue via Al Hodeidah over a longer period with an extension of the truce.

Commercial flights to and from Sana'a

The terms of the truce include the reopening of Sana'a International Airport to commercial flights between Sana'a and Cairo and Amman. The reopening is expected to bring relief to the population living in DFA areas - especially those in need of medical treatment abroad, whose only option to travel outside of the country by plane has been the long and dangerous trip across frontlines and checkpoints to Aden or Seyoun (in IRG areas) (The National 08/04/2022). The first flight was set to take place on 24 April from Sana'a to Amman, but it was postponed, with both the DFA and IRG blaming each other for the postponement (France 24 24/04/2022). Following the IRG's approval for passengers to use DFA-issued passports, the first flight took place on 16 May between Sana'a and Amman (OSESGY 16/05/2022; ABC News 16/05/2022).

ECONOMIC BENEFITS AND HUMANITARIAN GAINS FROM A PEACE AGREEMENT **SCENARIO**

Both the IRG and DFA have maintained strong positions on key aspects of the economy, including restrictions on Al Hodeidah port and Sana'a airport, the formal banking sector, monetary policy, and crude oil exports. While, as indicated above, some of these aspects are part of the terms of the truce (e.g. allowing fuel imports through Al Hodeidah), there is a need for further significant progress - not only in terms of the resumption of commercial flights from Sana'a airport but also concerning the broader economy. Implementing a permanent nationwide ceasefire and continued efforts on coordinated economic measures, the removal of restrictions on imports at Al Hodeidah (not only on fuel), and inland customs duties could result in the benefits of peace offsetting those of protracted conflict. Such an outcome could lead to an overall improvement of the humanitarian situation in Yemen, particularly in relation to households' purchasing power and their ability to access goods and services to meet their needs. The section below looks at some of those potential benefits.

Unified monetary policies and access to international financial services

The coordination and unification of monetary policies are expected to help lower commodity prices, improve households' purchasing power, and increase food security levels. The reunification of monetary policy would facilitate operations for international donors, UN institutions, and INGOs when it comes to humanitarian programming. It should also increase the effectiveness and positive impact of humanitarian funding provided to Yemen, specifically regarding the implementation of cash assistance programmes, not least because of the reduced opportunities for currency arbitrage.

Competing monetary policies, which resulted in the fragmentation of the economy, local currency, and financial sector, have made the management of Yemen's sizeable macroeconomic problems incredibly difficult to manage, contributing to a deterioration of Yemen's general business operating environment. Divergent policies between CBY-Aden and CBY-Sana'a and decreasing foreign currency supplies have reduced access to foreign currency and letters of credit via CBY (Sana'a Center 09/09/2019). Access to correspondent accounts has become more difficult during the conflict, as additional de-risking measures have been applied against Yemeni banks by foreign banks.

The de-escalation and depoliticisation of the financial sector that could be a precursor to, part of, or symptomatic of a peace agreement should then prompt a more extensive evaluation of de-risking measures applied against Yemeni banks. These processes should also result in the increased support of external stakeholders to Yemeni banks - e.g. by offering Yemeni banks clear guidance on methods of increasing connectivity with international banking networks. De-escalation and depoliticisation would also ease the pressure on the formal banking system and enable it to collectively address the array of challenges it faces, such as the decreased confidence in Yemeni banks, a lack of liquidity, and its holdings of government bonds and treasury bills.

Increased levels of connectivity to international banking networks should result in their reopening and increased correspondent banking services. There would presumably also be increased confidence in Yemeni clients among foreign exporters, shipping agents, insurers, and other industry participants. The increased confidence could decrease demands for payments from Yemeni businessmen to be made in full in advance. The situation could also see increased credit services provided to Yemeni banks and the banks' clients and account holders. Donors, UN institutions, and INGOs that seek to use and, when necessary, transfer and exchange funds to be used in Yemen would also welcome the increased connectivity.

The ultimate objective would be to reunify the currency and remove the multiple exchange rates - both the market exchange rates being used and the different customs and national budget exchange rates.

Increased production and export of hydrocarbons

A nationwide peace agreement (particularly the ceasefire), a revenue-sharing agreement, and the continued easing of restrictions at Al Hodeidah port could foster an environment conducive to the increased production and export of crude oil. These outcomes could also lead to the restoration of LNG exports and increased hydrocarbon export revenues. As a result, the total revenue available for central governing authorities (and certain local governing authorities) would likely increase. Noting that the scale of Yemen's current macroeconomic problems directly affects the value of the rial, consumer prices, and purchasing power, foreign currency revenue generation from increased hydrocarbon production and exports would be a welcome boost to the Yemeni economy. It would likely relieve some pressure on the prices of commodities and households' expenditure (particularly in IRG areas). Likewise, a revenue-sharing agreement on hydrocarbons exports could further foster political negotiations and be a confidence-building measure for sustainable peace.

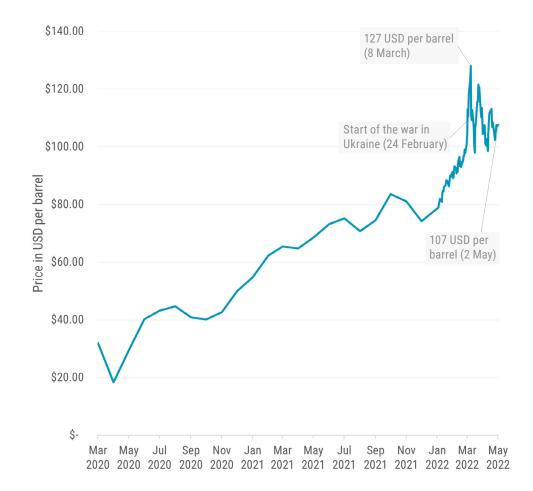
Crude oil

Crude oil export revenues currently represent the IRG's primary source of revenue. The IRG wants to keep generating as much revenue from these exports as possible, with crude oil currently being exported via Ash Shihr in Hadramawt and the Rudum/Nushayma terminal in Shabwah. The IRG wants to increase crude oil exports in the future by restarting production at currently offline oil production blocks (Reuters 14/06/2020; Offshore Energy 11/02/2019). Local governing authorities in Hadramawt, Marib, and Shabwah receive a 20% share of oil and gas revenues (ACAPS 26/07/2021; TCF 20/04/2021). It is worth noting that in January 2022, Governor of Hadramawt Maj. Gen. Faraj Al Bahsani, governor of Hadramawt, sent a letter to IRG Prime Minister Maeen Abdulmalik Saeed containing a series of demands. These demands included increasing Hadramawt's share of the revenue for crude oil exported from Ash Shihr Port (also locally referred to as Al Dabah Port) from 20% to 30% (Bogash 30/01/2022). The IRG and the future government in a postconflict setting would need to continue carefully managing the relationship with local governing authorities that are home to key hydrocarbon production and export sites and facilities.

For its part, the DFA has previously expressed interest in gaining access to revenues generated from crude oil production and exports. Their first option, which is directly linked to the FSO Safer, is the replacement of the vessel with a new floating offshore terminal and the reactivation of the Marib-Ras Issa pipeline (despite the expected high cost of rehabilitation and reactivation). The DFA is eager to see exports via the Marib-Ras Issa pipeline resume in a postconflict setting, but it would appear to make more commercial sense for crude oil to continue to be exported via Yemen's Gulf of Aden coastline. The rationale is based on the costs that would be incurred rehabilitating the Marib-Ras Issa pipeline, aside from the shorter distance and smaller total lift for crude oil sent from Marib to the Nushayma export terminal in Rudum district in Shabwah (it is roughly 350km from Marib to Rudum, with a total lift of 300m, compared to the distance of 438km and a total lift of 1,400m from Marib to Ras Issa).2 Another option is a possible crude oil revenue-sharing agreement, according to which the DFA also obtains access to a percentage of the crude oil produced for domestic use.

In 2021, Yemen exported 16.6 million barrels of crude oil (BBL), with an export value of USD 1.17 billion (KII 02/05/2022; Statista 11/04/2022).3 Looking ahead, several different factors could alter the exact amount of crude oil export revenue that IRG can generate in 2022. These factors include the price of oil on the international market and whether production and export levels in Yemen would change or remain the same. Global oil prices continued to rise in 2022, both prior to and immediately after the start of the war in Ukraine on 24 February 2022 (FT 07/03/2022). As shown in figure 3, global oil prices peaked on 8 March 2022, with Brent crude trading at USD 127 per barrel, followed by continued price fluctuations. The price of Brent crude on 2 May 2022 was USD 107 per barrel. If there are no changes to current production levels and using 2021 export figures combined with an average price of USD 100 per barrel, the total revenue generated would be an estimated USD 1.6 billion. A percentage of the total revenue would go to local governing authorities in Hadramawt, Marib, and Shabwah and foreign energy companies that have shares in and operate specific crude oil production blocs in Yemen - i.e. in OMV (Block S2) and Calvalley (Block 9). In a postconflict scenario, the volume of crude oil production would more likely increase. When estimating the possible increase in crude oil production and exports, it is necessary to examine the status and capacity of currently offline crude oil production blocks: Block 5 (Jannah), Block S1 (Damis), Block 32 (Hwarim), and Block 43 (South Hwarim). Among these blocks, Block 5 is the most likely to go online first. In this scenario (current production plus Block 5) and with an average price of USD 100 per barrel, crude oil exports would be over USD 2 billion.

Figure 3. Average monthly Brent crude oil price per barrel (USD) from March 2020 to May 2022



Source: Statista (11/04/2022), Markets Insider (accessed 02/05/2022)

In March 2022, the DFA signed a memorandum of understanding with the UN that includes a four-month emergency operation to transfer the oil from the FSO Safer to a temporary vessel and the installation of a long-term replacement vessel within a period of 18 months. (UN 08/04/2022; Reuters 06/03/2022)

² It is worth pointing out that the IRG is yet to complete plans that would see crude oil produced at Marib's Block 18 sent via a pipeline all the way to Rudum, Shabwa, by connecting a new pipeline from Block 18 with the existing pipeline that runs from West Ayad to Rudum. Currently, crude oil is being trucked from Block 18 to West Ayad, where it is then sent via the pipeline to Rudum. Thus, a cost-benefit analysis would need to consider how current costs of transporting crude oil from Block 18 to Rudum would compare to a scenario in which the crude oil is sent via a pipeline the entire way from Block 18 to Rudum, as well as comparing this to the Marib-Ras Issa route.

³ The total revenues is calculated using the total BBL exported (16.6 million) multiplied by the average Brent crude price in 2021 (70.68). It is worth noting that a percentage of the total revenue would be distributed to local governing authorities in Hadramawt, Marib, and Shabwah, as well as foreign energy companies that have shares in and operate specific crude oil production blocs in Yemen - i.e. in OMV (Block S2) and Calvalley (Block 9).



It is worth stressing that any economic gains made from increased crude oil export revenues are offset and overshadowed by the parallel rise in the cost of Yemen's total fuel import bill. Yemen is a net fuel importer, and food imports cover 90% of the country's staple food demand. As a result, global price dynamics for essential commodities imported to Yemen directly affect Yemen's import bill, consumer prices in Yemen, and households' purchasing power. The rise in the price of crude oil on the international market in 2021–2022, particularly after the Russian escalation of conflict in Ukraine, is good news for Yemen in terms of crude oil export revenues. The bad news is that the fuel import bill simultaneously increases. This increase also comes when the cost of wheat and other key commodities, as well as shipping costs, has risen both prior to and after the start of war in Ukraine. In 2021, the total fuel import bill was an estimated USD 2.3 billion. This figure could well be surpassed in 2022 based on international price dynamics so far in 2022 and the expected trajectory for the remainder of the year.4 One mitigating factor that helps bring the cost of Yemen's total fuel bill down is the Saudi fuel grant, with Saudi Arabia regularly providing fuel for electricity power generation in non-DFA areas since April 2021 (Reuters 31/03/2021).

Another mitigating factor concerns the possible internalisation of a larger percentage of crude oil produced in Yemen to help meet local demands and improve electricity services. Indicators suggest this factor is already occurring, noting the diesel subsidy programme introduced in Hadramawt at the end of December 2021. Through this programme, the staterun company PetroMasila allocates a daily quota of 350,000 litres of diesel for distribution and sale in Hadramawt governorate at a subsidised rate (Al Wattan 27/12/2021; Boqash Facebook 23/12/2021). The increased internalisation of crude oil production could yet form part of a hypothetical hydrocarbon production-sharing agreement, which would enable the IRG and DFA to obtain a mutually acceptable percentage of hydrocarbon production and subsequent revenues. The agreement would presumably help improve and enhance the role and effectiveness of state-run institutions in the hydrocarbons sector.

In summary, the long-term trajectory of Yemen's crude oil production is one of declining performance and returns. A way out of this trajectory is if new reserves are discovered, which is unlikely given the high level of exploration undertaken before the conflict began. That said, in a postconflict setting in which Yemen needs to generate as much revenue as possible to address the country's macro and microeconomic challenges, short-term gains from increased crude oil production and exports would be welcome. In the immediate postconflict setting, governing authorities must look to use the expected increase in crude oil export revenue as part of a broader strategy to increase economic diversification and reduce the country's dependency on hydrocarbon revenues to achieve a modicum of political and economic stability.

Liquefied Natural Gas

Yemen LNG (YLNG) suspended operations during the first half of 2015 (Reuters 14/04/2015). Overall, Yemen has an estimated production and export capacity of 6.7 million MT per year for a minimum 20-year period (YLNG accessed 02/05/2022). The resumption of LNG production and export operations could become a major confidence-building measure following the recent truce and reconfiguration of the IRG leadership. The current high price of LNG at USD 35/Mbtu, combined with a desire from several LNG import countries to reduce their level of dependency on Russian LNG, presents an opportunity for Yemen to fill part of the gap on the international market and generate additional revenue (Global LNG Hub 29/04/2022; IEEFA 11/03/2022).5 As a result, the recent momentum built up by key political developments and subsequent economic gains could be maintained with support from Yemen's LNG exports.

Based on the current international price, additional revenue could be generated from LNG exports. Careful consideration will need to be given to how LNG export revenues could be used, with possible options including:

- · depositing LNG export revenues in an escrow account placed under the supervision of an independent third-party (most likely a UN institution); the revenues could be left to accumulate over time, acting as a foreign currency reserve depository that can be accessed in a postconflict setting
- depositing LNG export revenues in an escrow account placed under the supervision of an independent third-party (most likely a UN institution), with a view to using the revenues for public sector salary payments
- the IRG unilaterally agreeing to pay public sector salaries across Yemen in both non-DFA and DFA areas.

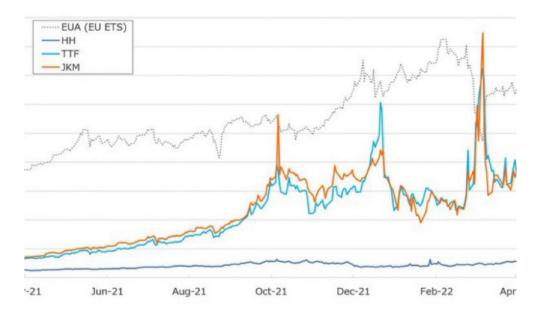
The list above is not exclusive, and other options could be explored, with the need to evaluate pros and cons for each.

LNG price variation would largely determine the amount of LNG revenue YLNG can generate. Global LNG prices in April 2022 were around USD 35/Mbtu, over 50% less than in the previous month when global LNG prices were as high as USD 80/Mbtu following the start of the war in Ukraine. Current prices are, however, much higher than compared to 12 months ago, when they were under USD 10/Mbtu (see figure 4).

⁴ This projection was calculated based on Yemen's average fuel import volume per month in 2021 equal to 380,000 MT (as per import data accessed by ACAPS in April 2022) and multiplied by the average price for Brent crude oil in 2021 equal to USD 70.68

⁵ To put the 6.7 million MT/year into context, 6.7 MT = 6.7/0.829 m3 = 8.1 m3. Germany imported 103 million m3 of LNG from Russia in 2021 to generate 142 billion m3 of natural gas. One m3 of LNG provides 1,380m3 of the natural gas that we burn. So Yemen could theoretically provide 7.8% of Germany's imports from Russia

Figure 4. Natural gas and LNG prices, 2021–2022



Source: Global LNG Hub (29/04/2022)

The actual 'profits' would be significantly less to begin with owing to:

- the need to clear the costs of running the YLNG facilities in standby mode accumulated since 2015
- · high staffing and operating costs and high ship charter rates
- existing contracts with TotalEnergies Gas & Power, Korea Gas Corporation, and GDF Suez, which would also have to be revisited as part of any attempt to resume LNG production and exports from Yemen; contracts were initially agreed upon in 2005 then renegotiated in 2012.

Key considerations for possible LNG revenue agreement or mechanism

The idea of reaching an LNG revenue-sharing agreement or mechanism presents, however, a series of challenges, and the window of opportunity is unlikely to remain open for long.

For operations to resume, the LNG facilities in Yemen need to be secure. Security threats would also have to be managed for several months – from the production and upstream facilities located at the Safer-run gas fields in Block 18, Marib, and along the 320km pipeline

to the LNG plant and port facilities at Balhaf in Shabwah. The management would include agreeing on security arrangements for the staff to conduct a thorough technical study of facilities to assess their condition and work at the LNG facility in the longer term.

Aside from the positions of DFA and IRG leadership and the difficulty of getting them to agree on the terms of a revenue-sharing agreement, the perspectives of the foreign energy companies that are major shareholders of YLNG would need to be factored into the equation.

It is vital to ensure a level of transparency about the terms of a new mechanism between relevant local and international stakeholders. The details that must be disclosed include: the details of sales contracts between Safer and YLNG and between YLNG and international buyers or shareholders (TotalEnergies Gas & Power, Korea Gas Corporation, and GDF Suez); where the international buyers and shareholders sell the LNG they receive from YLNG and the price they sell it for outside Yemen; and state revenues (including revenues versus expenditure and operating costs).

A percentage of LNG revenue should be allocated for 'rent payments' that ensure the continued security of YLNG facilities and the pipeline.

Given the price volatility, the amount of revenue that Yemen can generate from LNG will vary in years to come. Looking further ahead, beyond the next 12–24 months, and noting the possibility that LNG export revenues may decline, it would be wise to examine the case for internalising the use of the LNG produced to see if the domestic use of LNG could be increased to support the national economy. One area to explore would be using LNG for electricity power generation. A detailed assessment would need to be carried out to determine the viability of increasing the domestic use of LNG and transitioning out of diesel- and mazut-powered stations. LNG could also possibly be used in high energy demand industries in Yemen currently using coal.

Agreement and implementation of a fuel import mechanism for Al Hodeidah port

Aside from proposed efforts to resume LNG production and exports, securing an agreement on a new mechanism covering fuel imports via Al Hodeidah should remain a major priority. Renewed efforts should revisit the proposal previously tabled by UNDP to address some of the previous shortcomings of the OSESGY-brokered mechanism that unravelled in mid-2020. If the DFA and IRG agree on a new mutually acceptable Al Hodeidah fuel import mechanism, such an agreement could have a positive impact on important aspects of the economy, and society in general, in the short and long term.

Short-term impacts include:

- providing a welcome boost to two of the country's critical services and sectors by using a percentage of fuel import taxes and customs generated from fuel imports through Al Hodeidah to cover some of the cost of public health and education workers' salaries
- the increased possibility of reducing fuel prices in northern and northwestern governorates and resolving cyclical supply issues and shortages in southern and eastern governorates because of fuel being purchased from local markets in non-DFA areas then trucked overland to DFA areas. Lower fuel prices would reduce the cost of transporting trucked water (and help increase access to clean drinking water), the cost of irrigated food crops, and the transport of both locally produced and imported food (and other goods). Reduced fuel prices would also improve people's mobility to access livelihoods and services and increase humanitarian organisations' capacity to implement their programmes.

Longer-term impacts include the narrowing of opposing IRG and DFA monetary policies, which would help Yemen tackle liquidity, inflation, and exchange rate instability more coherently.

Improved business environment and increased economic and private sector activity

The easing of restrictions at seaports and Sana'a International Airport could increase state revenues connected to higher economic activity. Greater resources from revenue collection as a result of increased hydrocarbon production, domestic market sales, and exports could increase public investment in private-sector job creation schemes and economic diversification.

Development-oriented measures should target the agricultural, fishing, mining, and construction sectors and empower existing business networks through easier exchanges across governorates following a nationwide ceasefire. A focus on reconstruction could positively influence the labour-intensive construction industry. Resuming activities in the construction industry may benefit other sectors, including agriculture, upon the repair of dams and flood channels; tourism, upon the rehabilitation of tourist sites and roads; and economic activity in general, as industry is expected to require a significant workforce and would soak up some of the current unemployment.

The growing costs associated with food imports have highlighted the limitations of relying on foreign-imported food and the importance of developing domestic food production. Resources could be specifically devoted to promoting the modernisation of the domestic agricultural sector. An example would be by allowing more businesses to access well-funded microfinance programmes or providing financial and technical assistance to establish small and medium enterprises (SMEs) (Sana'a Center 29/08/2018). With import restrictions lifted, solar panels would become more accessible to farmers, incentivising the conversion of diesel-operated irrigation pumps into solar-powered pumps. The fishing industry may also benefit from greater efforts to demine fishing areas, modernise fishing ports in the Red Sea and the Gulf of Aden, and enhance domestic trade networks. Promoting Yemen's business sector and investing in SMEs would equip new traders to enter the market. Given the highly monopolistic nature of large traders in Yemen, investing in SMEs will pave the way for a more inclusive market and reduce the likelihood of monopolistic price increases. Traders who have benefitted from the current status quo could, in turn, have access to a larger market with lower transaction costs.

The stabilisation of the exchange rate would bring in greater financial stability, providing fresh opportunities for foreign investors and remittance senders. In particular, the current focus on short-term loan repayments may pave the way to greater investment in more sustainable long-term development (Sana'a Center 30/04/2020). The end of hostilities could also invite Saudi Arabia to establish a free economic zone in Al Wadi'ah, where Saudi capital can employ Yemeni workforce, ultimately helping the Yemeni Government fix its balance of payments (Sana'a Center 17/10/2018).

Increased local food production and the potential for nonhydrocarbon exports

A nationwide peace agreement, especially a permanent ceasefire and the lifting of restrictions at Al Hodeidah port, would have a positive impact on local food production in Yemen. Increased funding for development invested in human capital and local food production, including rural finance, seed banks, fisheries, community-level water, and solar power irrigation projects, would help meet immediate market needs, reduce reliance on food imports while developing entrepreneurship, and preserve Yemenis' livelihoods. These investments would also boost the potential for local food production to reach external markets. Local food production would also benefit from the wider availability of equipment, including solar- or fuel-powered water pumps to irrigate fields. In conjunction with a full or partial easing of import restrictions, these measures could reduce the costs carried by farmers, making agricultural exports more attractive to foreign markets.

Conflict has severely affected local food production in Yemen. Between 2014-2018, the amount of land cultivated with cereal crops dropped by 50% in conflict-affected governorates such as Al Bayda, Sadah, and Sana'a. Although production started to recover at the beginning of 2019, it remained 34% below 2014 levels by the end of the year (Ministry of Agriculture accessed 12/2020; ACAPS and Mercy Corps 17/12/2020). The agricultural sector depends on imports, notably of seeds, fertilisers, pesticides, and other equipment. Import restrictions and other conflict dynamics have increased the cost barriers for farmers in accessing necessary items to sustain production.

Decreased time and costs for inland transport

In a postconflict setting, the time and cost of transporting goods overland across Yemen are expected to decrease. First, the de-escalation of violence in conflict zones on or near key roads and intersections should enable more direct and faster transport and access routes. Second, the reduced number of checkpoints established for security and revenue-generating purposes should decrease overland transport times and costs and lower consumer commodity prices across Yemen, relieving the pressure on households' purchasing power.

The dismantling of customs checkpoints could prompt an end to the double taxation of goods currently entering Yemen via IRG-controlled seaports and land border crossings before they enter DFA areas. Central governing authorities would also plausibly be in a stronger position to work with local governing authorities to keep access routes open and prevent local armed groups from charging additional levies along transport routes.⁶ That said, the de-escalation and removal of checkpoints would almost certainly be a phased process implemented during an interim period. These processes would remain susceptible to regression. It is also worth noting that the inland customs checkpoints are designed to generate additional tax revenue for the DFA and regulate the flow of resources into their areas, sustaining the economy of the DFA.

The opening of Yemen's internal road networks may also coincide with the reopening of the Harad-Al Tuwal border crossing connecting northwestern Yemen and southwestern Saudi Arabia. A return to and increased cross-border trade through Harad-Al Tuwal would help galvanise local economies on both sides of the border. The same rules apply to the lesser-used but still notable Aleb and Al Boqaa border crossings. Increased cross-border economic activity would yield a positive net impact for the wider Yemen economy. That said,

some Yemen observers feel a return to preconflict conditions is unlikely given Saudi Arabia's reported desire to create a buffer zone (CEIP 14/06/2021).

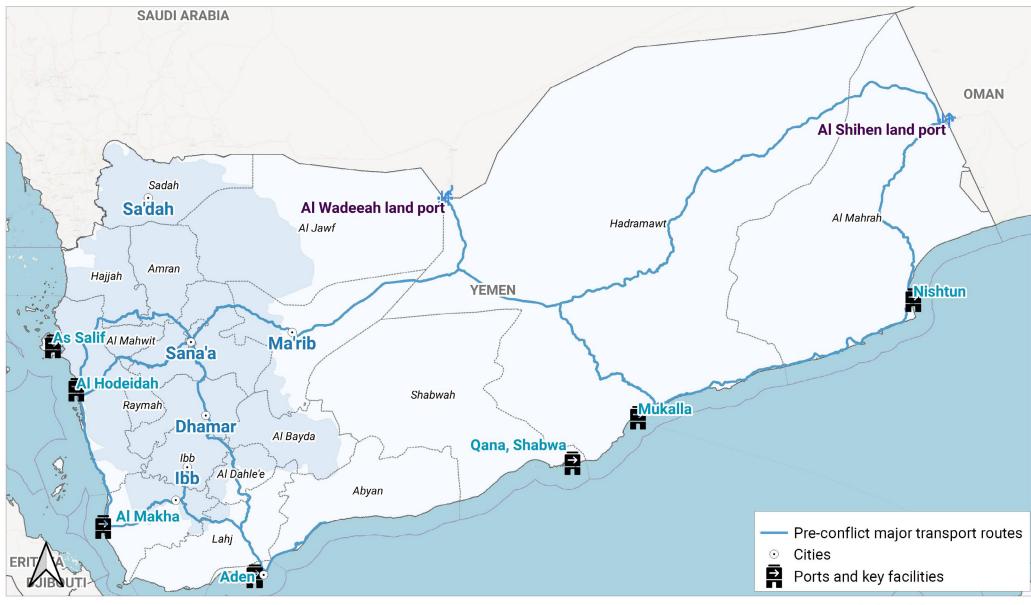
Major transport routes: comparison of preconflict and current situation

The maps below compare current main transport roads and those before the conflict. The first map includes the main roads that facilitate the quickest overland transport and distribution of key commodities that connect Yemen's main seaports and land border crossings. Local conflict dynamics affect most of those roads and access points and leave truckers taking alternative routes and incurring significantly higher costs. The second map shows which of the main roads report some level of restriction and the alternative detours transporters have resorted to during the conflict.

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⁶ Two examples of where additional levies are currently being charged because of the positioning and demands of non-state armed groups include: the YER 12 per litre of fuel levy that the Aden Hizam Amni (Security Belt) forces charge for all fuel entering the country via the Port of Aden and the multiple levies currently being charged for fuel being transported overland from Aden to Al Hodeidah and Sana'a.

PRE-CONFLICT MAJOR TRANSPORT ROUTES

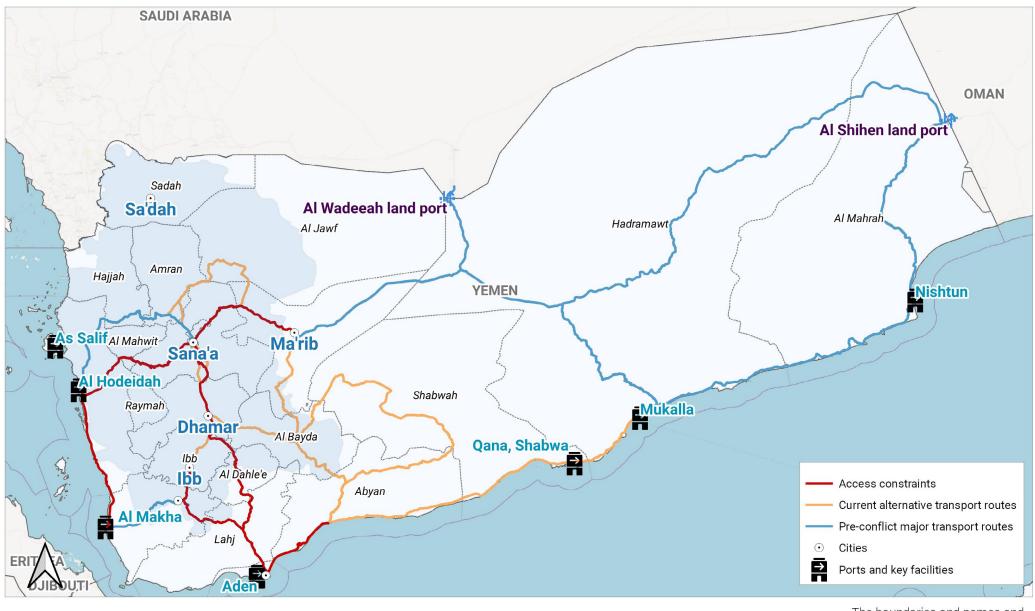


Date created: 06/10/2021 Source(s): ACAPS

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CURRENT MAJOR TRANSPORT ROUTES



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