Brokering a Ceasefire in Yemen's Economic Conflict

Middle East Report N°231 | 20 January 2022

Headquarters
International Crisis Group
Avenue Louise 235 • 1050 Brussels, Belgium
Tel: +32 2 502 90 38 • brussels@crisisgroup.org

Preventing War. Shaping Peace.

Table of Contents

Principal Findings

What's new? UN-led efforts to broker a ceasefire in Yemen have repeatedly stalled due to a standoff between Huthi rebels and the internationally recognised government over who has authority to control goods, particularly fuel, entering the Red Sea port of Hodeida. With the conflict escalating, the UN is struggling to make headway.

Why does it matter? The economy has become an integral part of the parties' efforts to strengthen their own positions while weakening their rivals. The economic contest has fuelled the fighting at the front and impeded attempts at peacemaking. But diplomats working to stop the war have too often sidestepped the issue.

What should be done? Yemen needs an economic ceasefire as much as a military one. In concert with other UN actors, the new UN envoy should launch a mediation track to identify the economic conflict's key players and begin to lay the groundwork for an economic truce even while the shooting continues.

Executive Summary

Yemen is caught up in overlapping emergencies that have defied mediation. In the north, bloody battles rage for control of Marib governorate between the internationally recognised government of Abed Rabbo Mansour Hadi and the Huthi rebels who ousted him in 2015. Hadi's government prevents fuel from entering the Huthi-held port of Hodeida, and a tug of war over the riyal, Yemen's currency, has led to its collapse in nominally government-controlled cities. These crises form part of a struggle over the economy – call it an economic conflict – that has compounded Yemen's humanitarian crisis, accelerated its political and territorial fragmentation, and stymied peacemaking. To date, mediation efforts have tended to treat economic matters as technical issues or sought to address them as "confidence-building measures" enacted in service of political dialogue. The new UN envoy should recognise them as core to the conflict and negotiate an economic ceasefire at the same time, and in much the same way, he seeks to arrive at a military truce.

The economic conflict pits the Hadi government against the Huthi rebels for control of the country's natural resources, trade flows, businesses and markets. State and non-state institutions that facilitate and hinder trade, such as banks, customs authorities and other regulatory bodies, along with the parties' respective security services, play supporting roles. The Huthis' advantage in this struggle is their growing control of territory and population centres; the Yemeni government's is its international legal authority.

The economic conflict's roots trace back to the country's failed political transition, which began in 2012 and collapsed in the face of the Huthi rebellion in 2014, setting in motion seven years of civil war and foreign intervention. The economic and military conflicts did not progress at the same pace. Some aspects of the former were held at bay during the war's early phases by an informal, technocrat-led economic truce that helped to protect pre-war economic institutions that remained highly centralised even as, in other ways, the country broke apart. Civil servants in Sanaa engaged with political leaders on both sides of the conflict and the parties quietly allowed the central bank to maintain a level of neutrality. The truce was never meant to be more than a stopgap measure, however, and it did not last.

Since the economic truce collapsed over the course of 2016 and 2017, the economic conflict has become sharper and more entwined with Yemen's shooting war. Its most visible features are the splitting of the central bank into rival authorities in Sanaa and Aden, a power struggle over control of trade flows and taxation of fuel in particular, and the precipitous drop of the riyal's value in nominally government-controlled areas. The riyal's depreciation has pushed the price of imported necessities such as food and fuel out of reach for many people. As a result, Yemen is the site of what the UN says is one of the world's largest humanitarian crises. By the end of 2021, the war had cost around 377,000 Yemeni lives, according to the UN Development Programme. Of this number, most were killed not by front-line fighting, shelling or airstrikes, but by hunger and preventable disease, the overwhelming majority of them young children and women.

The parties' tactics in the economic conflict have often backfired. The government's initiatives to wrest control of the economy from the Huthis have tended to rebound against it, in large part because the Huthis control Yemen's main population centres and hence its biggest markets. Diplomats have struggled to convince the government of the folly of its actions, in part because the economy is one of the few remaining sources of perceived leverage for President Hadi and his inner circle. Considering what is at stake – its very survival – the government is unlikely to stand down from economic warfare without major concessions by the Huthis, who perceive that they have the upper hand in the conflict and therefore see no reason to compromise. Yet, by delaying a settlement further, the government risks ceding still more ground to the Huthis.

The parties' economic tactics have bedevilled the succession of UN envoys who since 2015 have been charged with ending the war. For better or worse, their efforts have tended to focus on the political and military aspects of the conflict while viewing the economic conflict as a subplot even when it is fundamentally bound up with core political issues dividing the parties. The Stockholm Agreement, which prevented a battle for Hodeida, skated over rather than resolved important economic issues. More recent efforts to resolve the Marib crisis and Hodeida embargo have similarly stumbled in treating profoundly important proposed economic concessions as "confidence-building measures".

This approach needs to change. While the economic dimensions of Yemen's conflict are not the only impediments to peace, it is difficult to imagine the parties reaching a durable military truce if they fail to reach an economic one alongside it. The new UN envoy, Hans Grundberg, who assumed his post in September, is considering how his office can address the economic conflict. He has some useful models to follow. In Libya, for example, the UN envoy's office initiated a separate track for economic issues that fall within the framework of broader conflict resolution efforts. Grundberg should take a page from this book, establishing a formal track to address the economic challenges that have become interwoven with the toughest political issues that separate the parties. The concrete objective would be an agreement in which the conflict parties pledge to stop working to damage each other economically and to cooperate in the interests of ordinary Yemenis who desperately need both economic opportunity and better services.

In early 2022, the conflict for Marib escalated. Without progress on the economy, Grundberg is unlikely to be able to stop the shooting. Many of the same obstacles to agreement that have dogged mediators in their pursuit of a military ceasefire will encumber their efforts to achieve an economic truce. Even with international support – which outside actors should certainly lend him – the envoy faces an uphill climb. But that climb will almost surely be steeper still without a dedicated effort that allows mediators to better understand and deal with the economic issues that are so fundamentally bound up with the political drivers of Yemen's civil war. Seven years into this brutal conflict, it is past time to give this task a try.

Amman/Cairo/Aden/Sanaa/New York/Brussels, 20 January 2022

Brokering a Ceasefire in Yemen's Economic Conflict

I. Introduction

In September 2014, a coalition of Huthi rebels and loyalists of former President Ali Abdullah Saleh seized Sanaa, Yemen's capital, after several days of fighting on the city's outskirts. The fall of Sanaa marked the end of a transitional period that had begun in February 2012, when Abed Rabbo Mansour Hadi – Saleh's successor – assumed the presidency. Saleh had been forced from office following a popular uprising against his corrupt and sometimes brutal 33-year reign. Elected in a non-competitive process, and enjoying international recognition, Hadi was to be a caretaker leader while a National Dialogue Conference prepared recommendations for a constitutional drafting committee in anticipation of fresh elections. But this ambitious program failed. Buttressed by popular frustration with economic conditions and supported by Saleh and his allies, the Huthis took advantage of state weakness to expand their territorial control, until they captured Sanaa itself.

As most of Yemen's national institutions were in the capital, it seemed that the Huthi-Saleh alliance had taken over the Yemeni state. Certainly, they tried to do so. After taking Sanaa, their combined forces moved to gain control of most of the country's main population centres, commercial hubs and natural resources.[1] Six years later, a senior official of the transitional government that the allies had deposed reflected:

> They did what you do when you stage a coup. ... The Saleh people had run Yemen for three decades, so they knew what was important and where to go to make sure they could finance their operations. ... And they almost succeeded.[2]

But the Huthi-Saleh coalition failed in its drive to bring the entire country to heel. In February 2015, President Hadi, whom the alliance had placed under house arrest in Sanaa a month earlier, and who resigned in response, fled to the southern port city of Aden. There, Hadi rescinded his resignation, which he said he had made under duress, called for international military intervention to restore his government to power and named Aden the interim capital.[3] In March 2015, a Saudi Arabia-led coalition launched a military intervention with U.S. support that by mid-year had pushed the combined

[1] The Huthi-Saleh alliance relied on a mixture of force and negotiations, which in many cases began long before the rebels entered the capital. In October 2014, after seizing Sanaa, the Huthis, along with Saleh loyalists, took the Red Sea port of Hodeida and separately began intensive (and fruitless) talks with tribal leaders in Marib seeking entry to the oil-rich governorate. Huthi officials travelled to Aden in October-November 2014 to meet with southern separatist leaders and others in an effort to broker a similar compact, meeting with similar rejection. They also launched negotiations with leaders in Taiz and Ibb governorates before capturing Sanaa.
[2] Crisis Group telephone interview, former Yemeni government official, December 2020.
[3] The Huthis, who had announced they were replacing the presidency with a Revolutionary Council, dismissed Hadi's move.

Huthi-Saleh forces out of most of the south.[4] The UN and foreign powers continued to recognise the transitional government as Yemen's rightful rulers, allowing President Hadi to lead anti-Huthi Yemeni forces, albeit mostly as a figurehead based outside the country.[5]

In April 2015, the UN Security Council passed Resolution 2216, in which it recognised Hadi as Yemen's legitimate president, called upon the Huthi-Saleh alliance to hand over weaponry and, in effect, surrender, and imposed an arms embargo on Saleh and two Huthi leaders. The two-party framework for negotiations established by 2216 was aspirational at best, even at the time. It is now significantly outdated, not least because the Huthis killed Saleh in December 2017 after the alliance frayed. Armed groups that are not subordinate to either the Huthis or the Hadi government have proliferated since 2015 and the country has been split into multiple zones of military and political control.

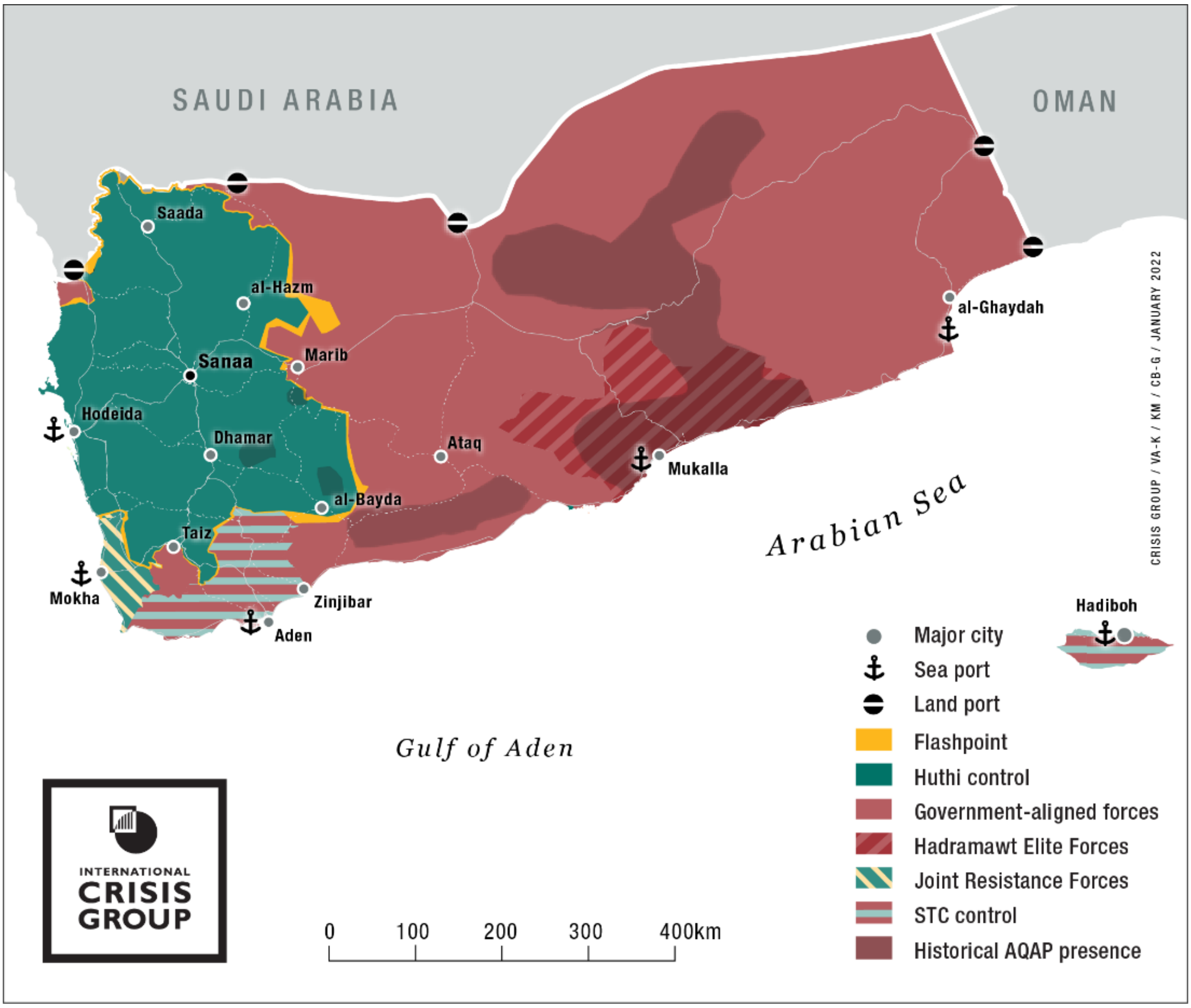
Given the significant strengths of the sides the UN engages in talks in Yemen – the Huthis' control of most national institutions and increasingly dominant military position on the ground versus the Hadi government's foreign backing and international legal standing – it is not surprising that neither has been able to achieve a decisive political or military victory. To gain an edge, the Huthis, the Hadi government and the Saudi-led coalition all have increasingly turned to economic tools. Over time, their economic interventions against each other, which this report refers to in the aggregate as Yemen's "economic conflict", have both complicated efforts to end the shooting war and deepened what the UN has long described as one of the world's largest humanitarian crises.

This report explores Yemen's economic conflict and offers recommendations for preparing to address it as part of UN-led peace talks. Blending qualitative and quantitative research methodologies, it is based on around 80 interviews with Yemeni businesspeople, bankers, civil servants and political leaders, as well as regional and international officials, conducted between June 2020 and November 2021. Its quantitative analysis uses district-level control mapping checked against similar data gathered by the Armed Conflict Location & Event Data Project (ACLED); analyses of pricing and currency data collected by the World Food Programme (WFP); and figures collated by a private trade data collection firm. It also draws on work conducted by the Assessment Capacities Project (ACAPS), a humanitarian analysis consortium.[6] Lastly, it benefits from unpublished work by the International Growth Centre's State

[4] The Huthi-Saleh alliance faced stiffer-than-expected resistance from local fighters accompanied by those national forces that had not joined their side in Aden, Marib and Taiz. On 25 March, Riyadh announced the formation of a 22-country military coalition to support Hadi, launching an intensive campaign of airstrikes along with a naval blockade of Yemen's ports. Only a handful of the countries Riyadh said were part of the coalition actually participated in the war, and several capitals said they had not agreed to participate in the campaign. The United Arab Emirates (UAE) and, to a lesser extent, Bahrain became the kingdom's main military allies in Yemen.
[5] See Crisis Group Middle East Briefing N°52, *Instruments of Pain (I): Conflict and Famine in Yemen*, 13 April 2017.
[6] The ACLED data is from its interactive dashboard online. The WFP data is from its Humanitarian Data Exchange. The ACAPS data is from its Yemen crisis webpage.

Fragility Initiative. The report builds on Crisis Group's extensive previous research aimed at ending the Yemen war and blunting its humanitarian impact.[7]

Figure 1: Map of political control, December 2021



[7] See, most recently, Crisis Group Middle East Reports N°s 216, *Rethinking Peace in Yemen*, 2 July 2020; and 221, *The Case for More Inclusive – and More Effective – Peacemaking in Yemen*, 12 March 2021; as well as Crisis Group Middle East Briefing N°84, *After al-Bayda, the Beginning of the Endgame for Northern Yemen?*, 14 October 2021.

II. Economic Truce, Economic Warfare

A. *Weak Economic Foundations*

Already before the war, Yemen's factious elites were competing over an economy that rested on weak and crumbling foundations.[8] Economic output relied heavily on dwindling hydrocarbon exports, import-led trade – the country purchased some 90 per cent of its wheat and all its rice from overseas – and services such as banking and telecommunications. To pay for imports and support the Yemeni currency, the riyal, the government relied on foreign currency earned through oil and gas exports and on remittances from Yemeni workers abroad. Oil and gas revenues underwrote a large public-sector wage bill and costly fuel subsidies. This setup fostered corruption, left Yemen in a near-permanent fiscal and monetary crisis, and made the country vulnerable to international commodity price shocks. When oil prices fell on global markets, state revenues plummeted. When they rose, income increased but so, too, did the cost of fuel subsidies, which by 2014 outstripped oil export income.

Against this backdrop, political stability was largely dependent on patronage networks, which formed around a regime that had only tenuous control of national territory and splintered during Yemen's 2011 uprising.[9] Regime infighting that year caused an economic downturn and exacerbated unemployment. Yemen's poverty rate topped 50 per cent by the end of 2011.[10] The main geographic node in this unstable and unsustainable system was Sanaa, with its government institutions. The finance ministry and central bank provided importers with letters of credit, managed hard currency supply to maintain the riyal at a stable exchange rate to the dollar, oversaw the payment of fuel subsidies to a state-run firm that held a near-monopoly on domestic fuel distribution, and managed salary payments.[11] The private sector, almost exclusively headquartered in Sanaa, was reliant on favourable treatment from political allies in the capital.

Although they had been expanding their territorial footprint for months, the Huthis framed their push to Sanaa in 2014 as a response to the Hadi government's decision to cut almost all fuel subsidies overnight in August of that year. The Huthis, citing corruption, economic mismanagement and foreign control of policy decisions, launched what they termed a "revolution" against the government of President Hadi, setting

[8] Ginny Hill, Peter Salisbury, Léonie Northedge and Jane Kinninmont, "Yemen: Corruption, Capital Flight and Global Drivers of Conflict", Chatham House, September 2013.
[9] In its 2014 Country Economic Memorandum on Yemen, the World Bank noted: "The country has long been hostage to a short-term rent extraction frenzy by multiple elites who have undermined any possibility of sustainable development, have been able to distort economic policy and block reforms, and have continued to seek rents aggressively that might otherwise have been recycled into development. This has occurred in the most profitable or most strategic economic subsectors such as oil and gas, agriculture, water, telecommunications and financial services". "The Republic of Yemen: Unlocking the Potential for Economic Growth", World Bank, October 2015.
[10] The state employed around 1.25 million Yemenis, up to 10 per cent of them "ghost workers", who were on the payroll but rarely if ever showed up to work, while it also heavily subsidised the cost of fuel, and carefully controlled fuel supply and distribution via state-owned companies. Peter Salisbury, "Yemen's Economy: Oil, Imports and Elites", Chatham House, October 2011.
[11] Ibid.

up protest encampments in and around Sanaa while launching a military offensive from their base in the northern Saada governorate.[12]

After the Huthis and their allies took Sanaa, they appointed loyalists to oversee work at ministries and the central bank. These new *mushrifeen* (supervisors) paid particular attention to the finance ministry, which held data on the government's cash reserves and revenue-generating operations – the state's financial lifeblood.[13]

The outbreak of the war with the Saudi-led coalition in 2015, sparked by Huthi-Saleh expansion from Sanaa earlier in the year, split Yemen into several zones of territorial control and further buffeted the ailing economy. Front-line fighting, shelling and airstrikes badly damaged infrastructure and agricultural output.[14] Oil and gas exports ground to a halt, gross domestic product fell by an estimated 28 per cent in 2015, and the country descended into simultaneous fiscal, monetary and financial crises. In June 2015, financial officials in Sanaa wrote in a note to international institutions that "the fiscal situation is catastrophic!!!"[15]

Yet for all the surrounding chaos, the war did not, at first, cause irreparable fractures in state economic institutions. Technocrats in ministries brokered an informal institutional arrangement between Huthi-Saleh-controlled Sanaa and the Hadi government, which had by that time largely relocated to Riyadh despite naming Aden Yemen's temporary capital.[16] The deal aimed primarily to protect the finance ministry and central bank from being politicised and ensure that the economy continued to function.[17] The deal was supported by a World Bank official seconded to the UN envoy's office in 2014 and other international officials who recognised the risk to the economy of allowing institutions to crumble or fragment.[18] Civil servants in Sanaa remained in direct contact with ministers in the Hadi government, then headed by Prime Minister Khaled Bahah.[19] Who had the authority to issue instructions to staff, and who did not, was opaque, and the setup clearly could not last for long.

But it was not intended to endure: the stopgap arrangements, which officials described as an "economic truce", were based on the assumption that a political settlement was inevitable and imminent.

---

[12] Peter Salisbury, "From outcasts to kingmakers", *Foreign Policy*, 10 October 2014.
[13] Crisis Group interviews, former ministry officials, Amman, September 2019; Cairo, January 2021.
[14] "Assessing the Impact of War of Development in Yemen", UN Development Programme, 1 May 2019.
[15] "Yemen's Status Update as of June 28, 2015", note from finance ministry officials on file with Crisis Group. In late 2014, at the tail end of the country's abortive UN-overseen political transition, before and after the Huthi takeover, finance ministry officials began to raise the alarm about a foreign currency crunch and fiscal crisis, warning that they would soon be unable to pay salaries or import goods. See Peter Salisbury, "Yemen's astonishing financial meltdown", *Foreign Policy*, 11 December 2014.
[16] Crisis Group interviews, individuals involved in negotiating and maintaining the "economic truce" and later such efforts, Amman, Cairo, Oxford and by telephone, September 2019-May 2021.
[17] The bank continued to collect revenues, managed foreign exchange mechanisms including the letters of credit used to underwrite imports, and paid state salaries using the last parliament-approved state budget, from 2014, as a guide. Throughout 2015 and into mid-2016, the central bank chartered cargo flights to transport large numbers of riyal notes from Huthi-controlled Sanaa to other parts of the country in order to pay salaries. See Peter Salisbury, "Bickering While Yemen Burns", Arab Gulf States Institute in Washington, 22 June 2017.
[18] Crisis Group telephone interview, former official in the UN envoy's office, November 2021.
[19] Crisis Group interviews, individuals involved in negotiating and maintaining the "economic truce", Amman, Cairo, Oxford and by telephone, September 2019-May 2021.

This assumption proved mistaken. The war dragged on, and as it did, officials in Sanaa began to speak urgently of the need for emergency measures to prevent complete economic collapse. Central Bank Governor Mohammed bin Humam and his staff – in written correspondence and meetings with President Hadi, government officials, international institution representatives and foreign diplomats – warned from late 2015 onward that hard currency and riyal banknotes were running low.[20] The shortages risked weakening the currency – thereby reducing the inflow of basic goods and threatening the government's ability to pay public-sector salaries. They recommended that the bank suspend letters of credit for fuel and sugar imports in order to slow the pace at which it was using up its dwindling supply of hard currency; that the government liberalise the fuel trade by ending the state monopoly and allowing private firms to import and distribute it; and that the bank be authorised to print new riyal notes to make payroll.[21]

Mistrust between the Hadi government and central bank staff in Sanaa also became a growing impediment to managing the economic crisis. Amid UN-led efforts to broker a ceasefire and political settlement in early 2016, the government began to accuse bin Humam of allowing the Huthi-Saleh alliance to plunder the bank and its international accounts to underwrite their war effort. It blocked the bank from printing new riyals by sending a note instructing the Russian firm tasked with printing the bills to cancel the order.[22]

The bank continued to struggle. By mid-2016, it was having trouble paying state salaries. With bin Humam's term as governor up for renewal in August 2016, the economic truce's sponsors worried that a policy vacuum was emerging. Bank staff protested that they were working to prevent a Huthi takeover of the institution.[23] The UN envoy's office brought bin Humam to Kuwait to discuss the economy on the sidelines of peace talks.[24] But the government was increasingly hostile to him. Explaining the government position, a government economist noted:

> Bin Humam and his office couldn't guarantee the bank's independence. The government requested a suspension of payments to the [Huthi-Saleh-controlled] defence ministry at the very least. He said: "Listen, if I suspend the payments to the defence ministry, the Huthis will come over, take over the central bank and arrest my staff". … The central bank's leadership was in a very peculiar position.[25]

[20] Notes on file with Crisis Group.
[21] In July 2015, the Huthi-Saleh authorities in Sanaa unilaterally liberalised the fuel sector, ending subsidies and allowing the private sector, in effect, to replace the government in the state-dominated business of importing and distributing fuel, easing pressure on authorities in Sanaa to pay subsidies. See Abubakar al-Shamahi, "Yemen returns full circle as Huthis end fuel subsidies", *The New Arab*, 28 July 2015.
[22] Crisis Group interviews, former central bank officials, New York and by telephone, January and February 2021. See also Yara Bayoumy, "Exclusive: Yemen's central bank denies irresponsible use of external reserves", Reuters, 8 August 2016.
[23] Crisis Group telephone interviews, former central bank officials, April and May 2021.
[24] Crisis Group telephone interview, former official in the UN envoy's office, New York, November 2021.
[25] Crisis Group interview, Yemeni economist, Washington, March 2021.

Seeking to sustain the bank's neutrality, some senior officials in Sanaa, Riyadh and Aden, including Prime Minister Bahah, proposed establishing a coordinating office outside of Yemen under bin Humam or someone else.[26] By mid-2016, however, Yemeni government officials in Riyadh had also begun discussions with their Saudi and Emirati counterparts about reconstituting the central bank in Aden under new leadership. UN, U.S. and UK officials warned that doing so could prove economically catastrophic because the Hadi government lacked the resources or manpower needed to operate the bank. But they said they remained hopeful that UN-led talks in Kuwait between the government, the Huthi-Saleh alliance and the Saudis would resolve differences between the two sides.[27] As discussed below, those talks ended without producing a settlement in August 2016.

B. *The Saudi Blockade and the UN Verification Mechanism*

Control of Yemen's inbound trade also became caught up in the war during the conflict's first months. When, in March 2015, Saudi Arabia launched a naval blockade of Yemen's ports, diplomats scrambled to ensure that food, fuel and other basic goods could still get into the country.[28] The Saudis said the blockade was meant to stop the Huthis from acquiring Iranian weapons smuggled aboard cargo ships. Foreign officials tried to reassure Riyadh that allowing imports into the Huthi-controlled Hodeida port would not facilitate such smuggling, citing intelligence that showed most weapons were coming into Yemen on dhows, small boats mooring in coves along the coast, rather than cargo vessels. The UN appointed a veteran official to negotiate design of an inspection system for commercial ships docking in Yemen, known as the UN Verification and Inspection Mechanism (UNVIM).

This mechanism, which became operational in May 2016, allowed more goods into Hodeida but did not remove all obstacles.[29] In 2015, Saudi Arabia had created a unit in its defence ministry charged with monitoring maritime and airborne trade entering Yemen, calling it the Emergency Humanitarian Operations Cell.[30] The Hadi government authorised the cell to inspect vessels and detain them in what is known as the Coalition Holding Area, off the Red Sea coast of Saudi Arabia, and to oversee their

---

[26] Crisis Group interviews, individuals involved in negotiating and maintaining the economic truce, Amman, Cairo, Oxford and by telephone, September 2019-May 2021. See also Noah Browning, "How Yemen's wartime central bank keeps country afloat", Reuters, 10 June 2016.

[27] Crisis Group telephone interviews, Western official, December 2020; Yemeni economist, March 2021.

[28] Saudi officials argued that the resolution retroactively justified their naval blockade of Hodeida and other ports, even as UN officials lobbied successfully for ships to be allowed to enter. See Crisis Group Briefing, *Instruments of Pain (I)*, op. cit.

[29] The inspection mechanism's design posed a challenge, because the Hadi government insisted that it not infringe upon its internationally recognised sovereignty. "In hindsight: The story of the UN Verification and Inspection Mechanism in Yemen", *Security Council Report*, September 2016. On one hand, UNVIM was an "integral part" of the UN, aimed to facilitate "the unimpeded flow of commercial items to Yemen", according to the UNVIM website. But according to the same source it also "provide[d] support to the legitimate Government of Yemen for verification and inspection of … shipments intended for Yemeni ports that are not under the control of the legitimate Government".

[30] "Letter dated 22 January 2016 from the Panel of Experts on Yemen established pursuant to Security Council resolution 2140 (2014) addressed to the President of the Security Council", UN Security Council, 26 January 2016.

passage into Yemeni waters once the government had signed off on shipments separately as part of the UNVIM regime.[31] Coalition naval forces under the government's authority often delayed ships in the holding area and subjected them to intrusive searches even if they had received UNVIM clearances.[32] Businesspeople accused government officials of soliciting bribes in exchange for approval of shipments.[33] Citing regular delays in approvals, the Sanaa-based Huthi-Saleh authorities argued that this tangle of requirements and protocols still constituted a blockade, or siege, of their areas.[34]

C. *2016-2017: Ending the Economic Truce*

By mid-2016, as UN-led talks in Kuwait teetered on the verge of collapse, the technocrats' economic truce had become untenable. In July of that year, the Huthis and Saleh's pre-2011 ruling party, the General People's Congress (GPC), announced the formation of a new Supreme Political Council to perform presidential duties in Hadi's place, as well as a National Salvation Government, including a new finance minister who under usual circumstances would have assumed the position of central bank vice chair.[35] Days later, the Hadi government's Aden-based prime minister, Ahmed Obeid bin Dagher, issued a letter to the International Monetary Fund (IMF) and major international private and state-run banks, informing them that bin Humam and the Sanaa central bank no longer represented the Yemeni state.[36] The Kuwait talks ended inconclusively in August.

With the Huthis taking measures to cement their authorities' status as de facto rulers in Sanaa, the Hadi government responded by seeking to loosen the rebels' grip on economic institutions. In September 2016, President Hadi announced that his government was relocating the central bank's headquarters to Aden and installing as its governor a close ally, Monasser al-Quaiti, who had served as finance minister in Riyadh since 2015.[37] But the announcement did not translate into tangible changes at first. The Huthis did not recognise the move, and central bank staff at the Sanaa headquarters continued work as normal. Moreover, the government did not initially have

[31] At first, UNVIM staff simply checked paperwork. But from November 2017 onward, after a series of Huthi missile attacks on Saudi Arabia, Riyadh again cut off shipping to Hodeida. In order to resume bringing in cargo, UNVIM agreed to perform physical inspections of ships. UNVIM officials note that, as of September 2021, none of their inspections has turned up illicit weapons. Crisis Group interview, UN official, Djibouti, March 2021.
[32] Crisis Group telephone interviews, traders, shipping industry official, February and March 2021.
[33] Salisbury, "Bickering While Yemen Burns", op. cit.
[34] Crisis Group interview, senior Huthi official, Sanaa, July 2019.
[35] Jaber Ali, "Yemen: Ansar Allah signs agreement with Saleh's party creating supreme political council", *Middle East Confidential*, 29 July 2016. Earlier, in April, Hadi had named the powerful military leader Ali Mohsen al-Ahmar as his vice president, in what many Yemeni insiders saw as a signal of a shift toward a more hardline approach to the conflict. Crisis Group interview, former Yemeni official, Abu Dhabi, November 2019. Crisis Group telephone interview, former government official, Cairo, March 2021.
[36] Letter on file with Crisis Group.
[37] "Yemen president names new central bank governor, moves HQ to Aden", Reuters, 18 September 2016. Quaiti was director of the state-owned Cooperative Agricultural Credit Bank at the time of his appointment.

access to the bank's SWIFT system, used to make international transfers. Nevertheless, over time, the government began to staff the Aden branch of the bank and sought to claim control of international accounts and the SWIFT code.

The government said moving the bank to Aden was necessary, in part because bin Humam's term was expiring, but the decision was made hastily and without planning.[38] President Hadi offered a strategic rationale, namely, that the move would help to cut funding to his rivals.[39] A former government official said:

> It wasn't very complicated. They wanted to turn the tables so that they had the money and the Huthis had none, and so that the Coalition wasn't on the hook to finance them in the future. But there wasn't a plan in 2016, there wasn't a strategy beyond that desire, to move the bank.[40]

The move also prompted speculation about Hadi's political intentions. The new governor primarily hired southerners to run the bank in Aden and elevated a number of staff from what had been a local branch of the central bank to senior positions, convincing some Yemenis that he was, in effect, building a southern institution to break away from the north. A central bank official said: "We honestly were unsure ourselves if this was going to be a central bank for the south or for Yemen as a whole".[41]

In 2017, the new bank started printing riyal notes in a new format, giving rise to additional rumours – propagated by some in the government camp – that it planned to remove from circulation the old currency used by the Sanaa central bank. (Government officials now deny that they ever considered that step.[42]) The government said the new notes would be used to pay salaries, but it did not publish either figures on how much money had been printed or an annual budget, complicating the task of tracking what it was doing with the notes.

Many, on both sides of the war, came to wonder if the government was trying to fully control Yemen's monetary policy to the detriment of the Huthi-run economy.[43] The Huthis in particular accused the government and the Saudi-led coalition of seeking to decimate the economy in order to starve the Huthis into submission. A senior official at the Huthi-run Sanaa Central Bank of Yemen said:

---

[38] In the telling of government officials, as well as diplomats and international institution staff who discussed the matter with the government at the time, the government had no plan either to place bank staff in Sanaa under the new leadership in Aden or to replicate the bank headquarters' activities at the branch in the southern port city. Crisis Group interviews, diplomats, international financial institution official and former central bank officials, September, November and December 2020; March and May 2021.
[39] In an address to the UN Security Council, President Hadi argued that the central bank move was designed to "end the war by restricting the flow of funds to the militias". "Yemen-President Addresses General Debate, 71st Session", speech to the 71st Session of the UN General Assembly, 23 September 2016.
[40] Crisis Group telephone interview, former government official, December 2020.
[41] Crisis Group interview, New York, September 2017.
[42] Crisis Group interview, government official, New York, November 2011.
[43] "Moving the central bank to Aden, Saudi Arabia's card to recruit Yemeni people", *Yamaniyoun*, 4 October 2016 (Arabic).

> All economic sectors have been targeted by the coalition of the aggression against Yemen. They do whatever they can to destroy the economy in general. The coalition was planning the total economic collapse of the economy and government institutions so we would arrive at a state of hunger and violence.[44]

Saudi and government officials deny such claims. But the economy had clearly become politicised and was now more entwined than ever with the conflict.

D. *2017-2018: A Regulatory Vacuum*

By early 2017, the Hadi government and the de facto authorities in Sanaa had each taken measures to ease the financial burden of costly pre-war import and currency support mechanisms – in each case by drawing back from certain roles it had played. In August of that year, the government liberalised the foreign exchange sector by halting efforts to defend the riyal against the U.S. dollar by selling hard currency into the local market at set rates, building on bin Humam's earlier decision to allow the riyal to decline from 215 to 250 against the dollar.[45] The move protected the bank's dwindling foreign currency reserves but eroded the influence it had wielded over markets when it was the primary source of hard currency.[46] The de facto authorities in Sanaa and the government also each announced moves to open up the fuel import sector, hitherto largely monopolised by state companies.

Combined with the central bank rift, which seeded confusion over who set monetary policy, oversaw private banks and regulated money exchangers – tasks the government was ill equipped to do given its lack of skilled staff or presence on the ground – the rivals' new laissez-faire approach to the financial and import sectors created the perception of a regulatory vacuum.[47] Yemeni financial institutions and businesses thus became seen as riskier partners for their international counterparts. Foreign banks in particular were already alarmed by the UN arms embargo on Huthi leaders and former President Saleh, which they feared could be a precedent for the U.S. or other countries to impose their own bilateral punitive measures. After the central bank

[44] Crisis Group telephone interview, senior Central Bank of Yemen Sanaa official, Sanaa, November 2021.
[45] "Central bank in war-torn Yemen floats currency", Reuters, 15 August 2017.
[46] The central bank and another state-run bank were the main sources of foreign currency before the conflict, a position which gave them leverage with currency changers. The government also elected to leave the currency conversion rate for its budget, customs and other duties unchanged at 250 riyals to the dollar, in effect discounting the cost of taxes and duties, while creating still-unaddressed irregularities in its budgeting practices. See "The central bank publishes today's foreign exchange rates against the riyal", Yemen Press, 20 April 2016 (Arabic); and "The Yemeni central bank fails to maintain the exchange rate of the riyal against the dollar, and banks are threatened with bankruptcy", *al-Taghyir*, 4 April 2016 (Arabic).
[47] In July 2015, the Huthi-Saleh alliance's Supreme Revolutionary Committee fully liberalised the fuel market in its areas by ending fuel subsidies and removing the state monopoly over fuel imports previously held by Aden Refinery Company and Yemen Petroleum Corporation. The government sustained the monopoly in its areas until it announced its own fuel market liberalisation policy in June 2016, although it did not enforce this measure until 2018. When UAE-backed forces drove al-Qaeda affiliates out of Mukalla in April 2016, they introduced their own independent import policies, ending the state monopoly and applying lower customs duties than were in effect at Hodeida or Aden.

move, they accelerated a process of risk-averse compliance measures, cancelling many Yemeni businesses' accounts. For this reason, many Yemeni businesses lost access to correspondent banking relationships abroad, which are key to their ability to transfer funds to pay for imports and other associated services.[48]

Moreover, with oil exports having collapsed in 2015, Yemen was increasingly dependent on remittances from abroad, which in turn were subject to regular interruptions due to transfer agencies' concerns over sanctions and running afoul of money-laundering and counter-terror financing laws.[49] Remittances and imports are vital to ordinary Yemenis' survival. With foreign currency in short supply and the international banking sector increasingly leery of doing business with Yemeni partners, informal money transfer networks, known as the *hawala* system, filled the void.[50] Imports became a crucial cog in the *hawala* machine, as they could be moved from other countries into Yemen and sold into local markets for cash, effectively sidestepping formal money transfers. Since fuel was the highest-value import item and a dollarised commodity whose price was no longer set by local authorities, and the removal of subsidies had made competing in the local market more profitable, it became a high-demand, transferrable store of value.[51] "Fuel became better than gold", a Yemeni businessman said.[52]

By 2017, economic battle lines had been drawn around Hodeida in particular. Fuel imports represented a copious and stable source of revenue at the Huthi-Saleh alliance-controlled port.[53] In the view of government officials, the alliance's collection of taxes and customs at the port, particularly but not only on fuel, was tantamount to plunder-

[48] Molly Anders, "Aid to Yemen blocked by banks, suffocating local organizations, report finds", Devex, 9 February 2018.

[49] Ibid. Pre-war remittance transfers took place through a mix of Yemeni and international banks; conventional money transfer organisations like Western Union or MoneyGram, which work in tandem with the formal banking and money exchange sector; and smaller money exchange and transfer firms.

[50] *Hawala* is a money transfer mechanism that circumvents the formal banking sector. Businesses and individuals often perform these transfers by collecting money intended for transfer from one country to another and using the accumulated funds to pay for goods that are transported to a second country. These goods are then sold into local markets. The money made from the sale is handed to the recipients stipulated in the original transaction. A Yemeni banker explained: "There is a very basic story with transfers, which operate around a form of the *hawala* system. People live in Saudi Arabia, the Gulf countries, Asia and so forth. Everyone outside of Yemen is transferring money home using money exchangers. The money builds up money exchangers' accounts in the countries they [Yemeni expatriates] are in, and they transfer it to traders. When they sell their goods in Yemen, the traders give the exchangers the cash they owe them in Yemeni riyals, and [the exchangers] give the recipients of the remittances their money minus a fee. It is a very old story, a common practice for Yemenis". Crisis Group telephone interview, Yemeni banker, March 2021.

[51] In approximate dollar terms, fuel accounted for more than 42 per cent of all imports into Yemen in 2020, but for only 27 per cent of trade volume in metric tonnes.

[52] Crisis Group telephone interview, Yemeni businessman, Dubai, November 2020.

[53] By 2017, customs represented around 15 per cent of revenues collected by the Sanaa authorities, the majority from fuel entering Hodeida port. Customs data on file with Crisis Group. Fuel allowed for businesses in Huthi-Saleh-held areas to operate machinery. It also permitted electricity to be generated, goods to be transported and water to be pumped – all activities that the Sanaa authorities taxed, contributing some 80 per cent of Sanaa's revenues in 2017. Lastly, it let the Huthi-Saleh armed forces keep waging war.

ing state resources; for their part, the de facto authorities in Sanaa argued that they were simply fulfilling their governing duties.[54] Hadi government officials and the Saudi-led coalition further alleged that Iran was boosting Huthi revenues by sending fuel shipments to Hodeida via the United Arab Emirates (UAE) at low or zero cost, which the rebels could sell in the local market.[55]

The duelling monetary policies of the rival authorities also caused friction.[56] The deregulation of markets, and delays in the Saudi-led coalition making a promised large dollar deposit at the Aden central bank, had led to a depreciation in the riyal's value against the dollar.

From early 2017, the fall in the riyal-dollar exchange rate accelerated, prompting tit-for-tat accusations from the rival parties.[57] The Huthis argued that the devaluation stemmed from the government's printing of banknotes to fund its budget.[58] The Huthis further argue that from 2017 onward the government was receiving income from customs and fuel exports that could have been used to stabilise the economy but were instead being plundered.[59] For its part, the government accused the Huthis of manipulating the riyal by pressuring traders to sell notes in large quantities in order to artificially depress the currency's value so that they could profit when it returned to earlier levels.[60] The government also alleged that the high volume of fuel imports into Hodeida were being used to transfer Iranian funds to the Huthis, a claim both the Huthis and Tehran deny.[61] In reality, both parties were to blame: all these factors and more played a role in accelerating the country's economic collapse.

E. *2018-2019: Conflicts Converge*

Yemen's economic and military conflicts converged in 2018. In December 2017, the Huthis had killed their erstwhile ally, Saleh, after months of rising internal tensions. Calculating that the Huthis had been weakened by their continuing battles with Saleh loyalists, the UAE announced that it was reinvigorating its year-old military campaign along the Red Sea coast with the goal of taking the port city of Hodeida.[62]

[54] "Yemeni minister says Houthis looting of central bank left state employees without salary", *Arab News*, 28 July 2020.
[55] The Huthis deny that they use Iranian fuel to finance their operations. But a 2019 UN panel of experts reported it had "identified a small number of companies, both within Yemen and outside, which operated as front companies" for the transfer of Iranian oil to Yemen at low or no cost at all to the Huthi authorities. "Letter dated 25 January 2019 from the Panel of Experts on Yemen addressed to the President of the Security Council – Final report of the Panel of Experts on Yemen", UN Security Council, 13 February 2019.
[56] "Volatility of the Yemeni riyal: Drivers and impact of Yemen riyal's volatility", ACAPS, January 2020.
[57] Amal Nasser and Alex Harper, "Rapid Currency Depreciation and the Decimation of Yemeni Purchasing Power", Sanaa Center for Strategic Studies, 31 March 2017.
[58] "Yemen's rial plummets as government and Houthis battle over banknotes", *Middle East Eye*, 9 January 2020.
[59] Crisis Group telephone interviews, senior Central Bank of Yemen Sanaa official, Huthi economic adviser, Sanaa, November 2021.
[60] Nabil Abdullah al-Tamimi, "Houthis' manipulation of currency prices threatens stability in Yemen", *Al-Mashareq*, 14 June 2019.
[61] Crisis Group telephone interview, Central Bank of Yemen official, Cairo, March 2021.
[62] "Saudi-UAE alliance launches fresh offensive on Yemen's Hodeidah", Al Jazeera, 18 September 2018.

From late 2016 onward, UAE officials had made three arguments for seizing Hodeida, claiming that with it under their control they could prevent Iranian arms smuggling through the port; secure the Red Sea shipping lanes from Huthi and Iranian attack; and be able to disrupt the Huthis' financing and logistical capabilities. This last point was, in Western officials' view, a way of suggesting that they would seek to wrest control of imports into Yemen via Hodeida from the Huthis, for whom it provided vital revenue. After the Kuwait talks' collapse in 2016, U.S. and British military officials, who rated the chances of success of a maritime assault on Hodeida poorly and worried that a battle for the city could deepen the humanitarian crisis, dissuaded the UAE from launching the operation.[63]

In parallel, the government began to discuss other plans to cut off the Huthis from revenues they earned from Hodeida, using its internationally recognised legal status as Yemen's sovereign authority. It was aided by Saleh loyalists, many of them senior members of the GPC (which as noted above was the pre-2011 ruling party), who left the important roles they had played in the Huthi-Saleh alliance and joined the anti-Huthi camp after Saleh's death.[64] Armed with economic expertise and knowledge of how the authorities in Sanaa raised revenues, they proposed a series of initiatives to weaken the Huthis' revenue collection capabilities and bolster the government's.

At the same time, the government sought to make itself a more reliable economic player and improve its governance. It increased the number of state salaries it paid, including some in Huthi-controlled territory.[65] It calculated that a battle for Hodeida, along with better security and service delivery in Aden, would lead Yemen's major businesses to move their headquarters to the interim capital, where the government could tax their profits.[66] In January 2018, Riyadh announced but held back disbursement of a $2 billion deposit for the central bank in Aden.[67] Government officials began to draft a series of conditions for access to letters of credit paid for through the Saudi deposit.[68]

Combined, a UAE-led takeover of Hodeida, an aggressive push to control fuel imports and remittance flows, and a recapitalised central bank could have dented the Huthis' ability to finance their operations in Sanaa while burnishing the government's economic governance capabilities. Some viewed the plan to sever the Huthis' revenue stream as designed mainly to improve the GPC's weakened position, rather than to bolster Hadi's.[69] Yemeni and foreign observers perceived an emergent if brutal eco-

[63] Crisis Group interviews, UK and U.S. officials, London and Washington, October and November 2016.
[64] Mohammed Ali, "Pro-government forces in Yemen bolstered by an unlikely ally", *Arab News*, 29 May 2018.
[65] Crisis Group interviews, Yemeni government officials, Washington and Cairo, April and May 2021. See also "The salaries of Hodeida employees, a decision by Hadi, a Saudi international welcome and a Huthi objection", *Al-Muqawama Post*, 28 December 2018 (Arabic).
[66] Crisis Group interviews, government officials, Aden, March 2019.
[67] "Saudi Arabia announces $2bn bailout for Yemen government", Agence France Presse, 17 January 2018. After a trial disbursal of $20 million in July 2018, Saudi Arabia and the Hadi government began to disburse the deposit that October, using an agreed-upon approval process for batches of payments.
[68] Crisis Group telephone interviews, government officials, February and March 2021.
[69] Some GPC insiders posited that Hodeida could become the party's new base of operations once the UAE-backed forces had seized it from the Huthis, making it a "GPC" city in the same way Sanaa had become a "Huthi" city. Crisis Group interviews, GPC officials, Cairo, Amman, UAE, 2018, 2019.

nomic strategy.[70] In line with comments from numerous other observers, a Western diplomat working closely on economic issues in Yemen at the time said:

> Moving the central bank to Aden was the first move in the economic war, but the real economic strategy was born in 2018. It was much bigger than anything Hadi could have come up with. The banks were essential to this part of the war, and so was Hodeida. You would get the revenues from Hodeida and then [once UAE-backed forces seized Hodeida from the Huthis] have the GPC bankers running things from branches in Hodeida, which is in the north, and move the whole economic infrastructure there.[71]

But the economic strategy floundered in the face of events on the ground. The Hodeida offensive did not take place. Amid the uproar over the Saudis' killing of Saudi journalist Jamal Khashoggi in October 2018, and fears of a humanitarian disaster voiced by Crisis Group and many others, the UN and U.S. intervened to stop a battle for the port and city.[72] Meanwhile, the central bank was unable to get access to the Saudi deposit until nine months after it was announced, also in October 2018, due to bureaucratic wrangling over the technical requirements for disbursal. By that time, the country was in the midst of a full-blown humanitarian and currency crisis.

F. *2019-2020: The Stockholm Agreement and Its Aftermath*

1. UN involvement

Before the Hodeida standoff, UN Envoy Martin Griffiths, who succeeded Ould Cheikh Ahmed in April 2018, had sought to avoid direct entanglement in economic disputes. He and his senior staff argued that their job was to end the war, not to get caught up in granular disputes over the minutiae of the economy.[73] But the agreement that he brokered to prevent a battle for the port city made such a stance untenable. In December 2018, Griffiths mediated a deal, the Stockholm Agreement, between the government and the Huthis, whose centrepiece, negotiated during indirect talks in Sweden, was a sub-agreement on Hodeida. The Huthis and the Hadi government committed to a ceasefire around Hodeida and neighbouring Red Sea ports, a redeployment of forces from Hodeida, an enhanced UNVIM inspection regime including a larger UN presence at Red Sea ports, and a new mechanism to collect port revenues and pay civil service salaries via the central bank branch in Hodeida, which the Huthis controlled.[74]

The agreement achieved the UN's primary goal – preventing a battle for Hodeida – but the text was loosely written and lacking in detail, particularly with respect to

[70] Crisis Group telephone interviews, Yemeni economic experts and Western diplomats, March and April 2021.
[71] Crisis Group telephone interview, Western official, April 2021.
[72] Bethan McKernan, "Yemen: Saudi-led coalition orders halt to Hodeidah offensive", *The Guardian*, 15 November 2018.
[73] Crisis Group interviews, senior officials in the UN envoy's office, March and October 2019; January 2020.
[74] "Stockholm Agreement", Office of the Special Envoy of the Secretary-General for Yemen, 13 December 2018.

the management of revenues generated at the Hodeida port.[75] The government interpreted the agreement as an assertion of its sovereign authority over Hodeida. Thus, it argued that it had the right to select the local security forces whom the agreement made responsible for securing Hodeida and its environs, and to control the central bank's Hodeida branch and hence port revenues.[76] The Huthis contended that the agreement stipulated that the existing police and coast guards (largely aligned with them) would remain in place following the withdrawal of rival military forces from Hodeida. The Huthis' interpretation was closer to the UN negotiation team's than was the government's.[77] But the government argued that what the Huthis wanted was an unacceptable violation of its sovereignty, as recognised in UN Security Council Resolution 2216.[78]

In brokering the Stockholm Agreement, the UN necessarily adopted a ceasefire-first approach to mediation on the basis that preventing famine was the absolute priority.[79] But perhaps because of the urgency of the task at hand, the text of the agreement was light on detail. It treated security and economic provisions as addressing technical problems, to be resolved by mid-level officials through follow-up negotiations. Yet these provisions touched upon the fundamental question of who should have sovereign state authority – the heart of the political conflict. Problems would thus arise when it was time to implement the deal.

Once the Stockholm Agreement was brokered, the UN envoy focused on restarting high-level political talks, leaving the deal's security and economic aspects to less senior officials to deal with. He and his senior-most political adviser continued to argue that the economy was not within their office's remit, and that economic disputes would be settled as part of a national political agreement that would come at a much later stage of the mediation process.[80] Although they had brokered an agreement that dealt directly with the economic conflict, this dimension of the hostilities was clearly of a lower order of priority than, for example, a military ceasefire or political talks, even if it was a barrier to political progress.

In January 2019, the UN Security Council passed Resolution 2452, establishing the Mission to Support the Hudayda Agreement (UNMHA) to observe the ceasefire and coordinate force redeployments outlined in the Hodeida provisions of the Stock-

[75] The agreement reads: "The revenues of the ports of Hodeidah, Salif and Ras Issa shall be channelled to the Central Bank of Yemen through its branch in Hodeidah as a contribution to the payment of salaries in the governate of Hodeidah and throughout Yemen". But it does not clarify who would have authority over the bank branch despite the central bank split. Nor does it explain how salaries will be paid.
[76] See Crisis Group Middle East Report N°203, *Saving the Stockholm Agreement and Averting a Regional Conflagration in Yemen,* 18 July 2019.
[77] Crisis Group interviews, Huthi representatives, UN officials, December 2018; January 2019.
[78] Crisis Group interviews, government officials, December 2018; January 2019.
[79] The need for ceasefires – in Hodeida and nationwide – was also a major thrust of Crisis Group's writings at the time. See, for instance, Peter Salisbury, "Making Yemen's Hodeida Deal Stick", Crisis Group Commentary, 19 December 2018; Peter Salisbury, "Five Steps to Save Yemen's Stockholm Agreement", Crisis Group Commentary, 15 January 2019; and Crisis Group Report, *Saving the Stockholm Agreement and Averting a Regional Conflagration in Yemen,* op. cit.
[80] Crisis Group interviews, UN officials, Amman, 2019, 2020.

holm deal.[81] Although UNMHA was a special political mission with a Security Council mandate, in practice its head reported to the UN envoy and relied upon him for contact with senior political officials among both the government and the de facto authorities. It dealt mainly with military and security officials who needed signoff from these same political leaders to make decisions.[82] Staff from the special envoy's office, meanwhile, sought to initiate technical talks about a revenue collection and sharing mechanism.[83] But they, too, dealt mainly with technocrats who lacked decision-making power or direct access to senior leaders. Both processes were troubled from the start, as the rival parties sought to litigate the Stockholm Agreement's meaning. UNMHA staff quickly saw that their efforts to implement the deal would be impotent without renewed political dialogue.[84]

Problems with the Stockholm Agreement bled over into other areas. Throughout 2018, the special envoy's staff had repeatedly attempted to coordinate a face-to-face meeting between the Sanaa and Aden authorities over economic management in the hopes of reintegrating the central bank and restarting national salary payments.[85] But after the Sweden talks, they were forced by the deal and the parties to narrow their focus to the opaque and contested revenue-sharing provision outlined in the Stockholm Agreement. A meeting held in Amman in March 2019 ended inconclusively after a series of spats over control of the central bank's Hodeida branch.[86] Still, the UN envoy's office continued to see its mandate as primarily focused on achieving a political settlement rather than placing greater emphasis on questions of economic sovereignty that were multiplying and becoming ever larger obstacles to peace.[87]

2. Wresting control by other means

As international opposition to a battle for Hodeida had become more evident over the course of 2018, the government began to take legal measures to wrest control of the economy by other means, many of them proposed by the GPC economic experts who had split from the Huthis after Saleh's death. In September 2018, President Hadi issued Decree 75, which called for a newly formed economic committee to approve all fuel imports and for the central bank in Aden to oversee all dollar transactions tied to imports.[88] The committee also set more stringent criteria for approval of import licences.[89]

Government officials involved with this and other similar decrees argue that they were simply attempting to impose regulatory structures after a period of lawlessness

[81] "UNMHA, Hudaydah Agreement", UN, January 2019.
[82] Crisis Group interview, senior UNMHA official, New York, September 2019.
[83] Crisis Group telephone interview, UN officials, April 2021.
[84] Crisis Group interviews, senior UNMHA officials, March and May 2019; February 2020.
[85] Crisis Group telephone interview, UN officials, Amman, December 2020.
[86] Crisis Group telephone interviews, UN, Huthi and government officials, December 2020; February-March 2021. See also "Yemen warring parties hold fresh talks as Houthis withdraw from Hodeidah", Reuters, 13 May 2019.
[87] Crisis Group interviews, two senior officials within the UN envoy's office, March, October 2019, January 2020.
[88] "The Most Important Indicators and Results of the Implementation of Government Decree No. 75 of 2018 and Its Executive Mechanism to Control and Regulate the Trade in Oil Products During the First Quarter of 2019", Economic Committee, March 2019.
[89] Ibid.

that, among other things, had seen the riyal's rapid depreciation.[90] But businesspeople and other economic observers believed the new regulations sought to curtail the operations of Huthi-affiliated traders.[91]

Over the course of 2019, as the government sought to enforce Decree 75, it also introduced Decree 49; the latter required the payment of customs and taxes to the government before shipments entered Yemeni ports, which the Huthis claimed ran counter to Yemeni law.[92] A series of standoffs ensued over fuel imports into Hodeida. The Huthis pressured importers not to submit applications to the newly formed Technical Office of the Economic Committee, which authorised ships to move into Hodeida from the coalition's maritime holding area.[93] The government responded by blocking ships from entering the port even after they had received clearance from UNVIM, unless they followed the new rules.

Following the promulgation of Decree 49, Hodeida's fuel imports fell sharply, and fuel shortages soon became commonplace in Huthi-controlled areas.[94] Fuel prices almost tripled in some of these areas, from 7,300 riyals (about $12) to more than 20,000 riyals (about $33) per 20 litres.[95] By October 2019, the coalition was detaining fuel vessels bound for Hodeida that UNVIM had cleared for passage in the holding area but that had not complied with the new regulations for an average of just under 30 days.[96]

In September and October 2019, worried that fuel shortages and price hikes would deepen the humanitarian catastrophe, the UN envoy's team pressured the government to release some fuel shipments. In November, it negotiated a temporary revenue collection and sharing mechanism. Under the new mechanism, fuel importers were to deposit all customs and tax payments in an account at the central bank's Hodeida branch; the Huthis were to regularly provide UN-verified bank statements showing the funds remained in the account until such a time as the two sides could reach an agreement on salary payments, which on paper was the main sticking point for both sides.[97] In return, the government suspended the two decrees' enforcement.

---

[90] Crisis Group telephone interviews, government officials, October 2018, October 2020 and February-March 2021.
[91] A month before announcing Decree 75 in July 2019, the government also banned imports from al-Hamriya port in Sharjah, UAE, as well as Iraq and Oman, arguing that shipments from these locations were of Iranian origin, in an apparent effort to hurt Huthi-affiliated traders. See also "The Yemen Review – October 2019, Economic Developments", Sanaa Center for Strategic Studies, 10 November 2018. An adviser to the government's economic committee said: "One of the reasons for Decree 75 was that most of the importers were Huthis, and it was Iranian fuel coming to Hodeida. They were trying to stop Iranian fuel coming in". Crisis Group interview, Cairo, March 2021.
[92] "Demanding to collect revenues in advance before it enters Hodeida is against Yemeni law. You cannot take taxes before unloading goods and merchandise. You can only collect revenues at the port," a Huthi economic adviser said. Crisis Group telephone interview, April 2021.
[93] Crisis Group telephone interviews, fuel traders, Dubai and Cairo, March and May 2021.
[94] Data on file with Crisis Group, provided by a private trade data collection firm.
[95] See "Yemen Economic Bulletin: Another Stage-Managed Fuel Crisis", Sanaa Center for Strategic Studies, 11 July 2020.
[96] C4ADS, a U.S.-based NGO, tracked waiting times in the Coalition Holding Area and in anchorage off Hodeida throughout 2019. Ships entering Hodeida during the standoff over Decree 75 and the implementation of the Hodeida Agreement in October 2019 had waited an average of just under 30 days in the Coalition Holding Area before being granted permission to enter Huthi-controlled waters.
[97] "Temporary arrangements for fuel imports to Hodeidah", note on file with Crisis Group.

Fuel flowed into Hodeida and prices fell, but the web of requirements governing fuel imports at the port grew more tangled.[98]

As the economic conflict escalated over the course of 2019, the government's economic strategy – and credibility – was further disrupted by tensions between Hadi loyalists and the Southern Transitional Council (STC), a self-styled government-in-waiting that seeks an independent southern Yemen. The two sides had clashed for several days in the streets of Aden in January 2018. Cooler heads prevailed but only for a time. In August 2019, STC forces fought a week-long battle that gave them near complete control of the government's temporary capital. The STC encircled but did not enter the central bank headquarters.[99] Despite Saudi-led efforts to broker a compromise between the two sides, the government subsequently has been unable to spend more than a few weeks at a time in Aden, departing during tensions with the STC and local protesters, while senior bank staff have in many cases chosen to operate from elsewhere in Yemen or even outside the country.[100] The government no longer controlled (and to this day does not control), in any meaningful sense, the temporary capital it had hoped to make Yemen's new financial and economic hub.

G. *2020-2022: Riyal Ban, Marib Battle*

Hopes that the UN mechanism would resolve the fuel standoff, or that a Huthi-Saudi back channel that reopened in September 2019 would signal the beginning of the end of the war, were soon dashed.

In December 2019, the authorities in Sanaa reintroduced a ban on new riyal notes printed by the central bank in Aden, delivering a blow to the economy in government-controlled areas.[101] The move came as Saudi Arabia's $2 billion deposit with the Aden bank, the government's principal tool for combating the currency's depreciation, began to dwindle, and the riyal began to lose value against the dollar in government-controlled areas.[102] Government officials had been hopeful that Riyadh would deposit more funds at the bank, which might have helped prop up the currency, but that did not happen. Media reports that the first tranche of currency had been mismanaged and an anti-corruption drive in the kingdom that ensnared senior Saudi military leaders

[98] In order to bring fuel into Hodeida, shipping companies had to pass UNVIM inspection before submitting documentation to an importers' association, which in turn would send the paperwork to the UN special envoy's office, which then would pass it on to a government technical office. Once the government had cleared a shipment, the Saudi oversight body would allow the ship to pass. Authorities in Sanaa and Hodeida would also need to give authorisation. Imports were subject to UN Resolution 2216, the Stockholm Agreement's terms and the UN-brokered temporary import mechanism, and also had to clear a series of legal hurdles imposed by Decrees 49 and 75, which the Hadi government lifted only partially.

[99] See Crisis Group Middle East Briefing N°71, *After Aden: Navigating Yemen's New Political Landscape,* 30 August 2019.

[100] "The Yemeni Central Bank almost doubles the interest rate to stop the decline of the riyal", Reuters, 19 September 2019.

[101] Ahmed Al-Haj, "Yemen officials: Rebel ban on banknotes stops gov't salaries", Associated Press, 31 December 2019. The Huthis had previously announced the ban in 2018 but had not enforced it widely.

[102] "Saudi Arabia injects $2bn to prop up struggling Yemeni economy", *Financial Times*, 17 January 2018.

involved in Yemen, among others, dampened Saudi interest in providing more funds to the government.

While nominally government-run areas made up more of Yemen's overall territory, the overwhelming majority of the country's population – more than 70 per cent – lived in Huthi zones of control. The Huthi ban thus essentially concentrated the new bills the government had printed since the beginning of the war in these much less populous areas, oversaturating the local currency markets that were starved of hard currency with riyals. The supply mismatch acted as an accelerant to the riyal's decline in government-controlled areas.

A military escalation in the north soon followed. In January 2020, skirmishes blew up into pitched battles between the Huthis and the government and its local allies in three northern governorates, al-Jawf, Sanaa and Marib. By March, the Huthis had seized al-Hazm, al-Jawf's provincial capital, and begun to push east toward Marib city, the government's last urban stronghold in the north, and nearby oil and gas facilities.[103] As the fighting intensified, the UN personnel who might otherwise have conducted face-to-face diplomacy had been grounded by the coronavirus.

In February 2021, the rebels stepped up their campaign in Marib and neighbouring governorates, and in September they started tightening the military noose around the governorate after seizing territory in its south.[104] A victory there would both provide supplies of fuel, electricity and revenue, and also, in the view of some Sanaa officials, allow them to export oil from Marib to a terminal at Ras Issa, north of Hodeida.[105] It would also deprive the government of significant funds and boost the Huthis' credibility among the population under rebel governance at Hadi's expense.

Overlap between the military and economic conflicts now became yet more significant. In February 2020, the Huthis stopped providing statements from the Hodeida central bank branch, later saying they had withdrawn funds to pay public-sector employees half their salaries amid a breakdown in negotiations over a salary payment agreement.[106] At the same time, the rebels reportedly purged remaining unaffiliated staff from senior bank positions, turning it into an entirely "Huthi" institution in the eyes of many officials, a charge the Huthis deny.[107]

In response, from June 2020 onward, the government intermittently halted approval for fuel shipments entering Hodeida, causing a steady decline in fuel entering the port and, as a result, a sharp price rise in Huthi-controlled areas despite falling global prices.[108] UN diplomatic intervention led to stop-start fuel shipment clearanc-

[103] See Crisis Group Middle East Briefing N°74, *Preventing a Deadly Showdown in Northern Yemen,* 17 March 2020.
[104] See Crisis Group Briefing, *After al-Bayda, the Beginning of the Endgame for Northern Yemen?*, op. cit.
[105] See Crisis Group Statement, "Crisis in Marib: Averting a Chain Reaction in Yemen", 22 February 2021.
[106] Crisis Group interviews, Huthi, government and UN officials, January-June 2021.
[107] Crisis Group telephone interviews, Yemeni businessmen, UN official, April 2021; September 2021.
[108] Fuel imports to Hodeida in January-May 2021 were only 15 per cent of imports over the same period in 2020. Diesel prices in Huthi-controlled areas increased dramatically during this period (rising $0.35/litre or 42 per cent in March 2021 versus March 2020, compared to a $0.17/litre rise in non-Huthi areas over the same period). The riyal's relative weakness in government-controlled areas masked the growing difference in fuel and food pricing in the two areas. In dollar terms, fuel

es in July and October-December 2020. But fuel import volumes at Hodeida continued to decline anyway as traders sought to avoid further disruption by shipping fuel to other Yemeni ports.

At the same time, infighting among the anti-Huthi ranks continued to hinder the government in imposing its will on the economy in areas under its nominal control. In April 2020, the STC declared self-rule in Aden, and surrounded the Aden central bank headquarters, although it did not enter the building. Two months later, the STC reportedly seized some 64 billion riyals in banknotes (more than $250 million at the exchange rate at the time) from bank authorities who were transporting them from Aden port to the central bank. Saudi Arabia again intervened, to prevent the bank's takeover by the STC, stationing its forces around the Aden bank's perimeter. In January 2021, the government again stopped most fuel shipments following a Huthi attack on Aden airport, in which a missile nearly struck the plane carrying Prime Minister Maen Abdulmalek Saeed's newly formed cabinet.[109] By mid-2021, fuel imports into Hodeida had slowed to a trickle.

Since early 2021, the economic and military conflicts have become yet more intertwined. In February and then again beginning in September, the Huthis made significant territorial gains in Marib and neighbouring governorates, getting closer to Marib city and the nearby Safer oil and gas facilities as well as a connected power plant. By mid-November, they controlled most of twelve of Marib's fourteen districts. As the Huthis moved deeper into the governorate, they became more vocal in arguing that life under their rule was superior to other parts of the country, fairer and more stable. They claimed that the government's local allies, particularly Islah, a Sunni Islamist party, were looting oil, gas and electricity, which the rebels said should be shared among all Yemenis, with the sharing controlled by the Huthis' de facto authorities.[110] They also burnished their reputation for responsible economic governance, for example by hastening to stabilise the riyal's value in areas they had captured.[111]

The government and their Saudi allies meanwhile sought new forms of economic leverage with the Huthis. In late 2020 and early 2021, officials from both governments lobbied the outgoing Trump administration to designate the Huthis a Foreign Terrorist Organization. In January 2021, in one of the administration's last acts, it obliged.[112] The designation's main effect would have been economic, forcing U.S. businesses to halt all commercial relationships with counterparts working in Yemen, diminishing trade flows and driving commodity prices up further. It would probably have achieved through legal means what the government and the coalition had earlier sought to do militarily – cut off Hodeida – but given businesses' risk aversion would also likely have curtailed trade to Aden, Mukalla and other nominally government-controlled

prices in Huthi areas were on average 70 per cent higher than in government-controlled areas in the first three months of 2021, whereas they were only 22 per cent higher in riyal terms over the same period.
[109] Nima Elbagir and Angela Dewan, "First fuel ship this year docks in Hodeidah as Saudi-led coalition relaxes blockade", CNN, 26 March 2021.
[110] Crisis Group telephone interview, Huthi supporter close to group's leaders, Sanaa, October 2021.
[111] Crisis Group telephone interviews, two local residents, Shebwa, October 2021.
[112] Bill Chappell and Colin Dwyer, "Trump administration moves to brand Houthis in Yemen a terrorist group", NPR, 11 January 2021.

ports, cutting off the government's nose to spite its face. In any event, the new U.S. administration of President Joe Biden quickly reversed the decision.[113]

The government, meanwhile, has struggled to cope with an escalating economic crisis in its own areas. But the government appears to have remained more focused on wresting control of the economy from the Huthis than on improving governance in the territory it controls. Since January 2021, protests have roiled Mukalla, Aden, Ataq and Taiz – the major cities under the government's control apart from Marib – over living conditions. The riyal fell to new lows against the dollar in Aden in December 2021, reaching a 1,700 to one exchange rate, despite the government having secured access to about $100 million held at the Bank of England and several hundred million dollars of IMF funding. The government responded by shuttering local exchange firms and asking foreign banks to freeze cooperation with a major Sanaa-based bank on the grounds that it refused to share data with Aden, and by auctioning limited amounts of hard currency on the local market. Aid officials saw the bank move in particular as disruptive to aid flows and an effort to strong-arm the UN into routing money via the Aden central bank.[114]

In early 2022, the government's situation appeared to improve and the Huthis' to worsen. Hadi's appointment of a new governor and board at the central bank, and rumours that a new deposit might soon be forthcoming from the Gulf states, led to a temporary rally in the riyal-dollar exchange rate to less than 1,000 riyals to the dollar, although by mid-January the rate had again sunk below 1,300 to one.[115] Around the new year, the Huthis were pushed out of Shebwa governorate by coalition-backed forces, the first time they had lost territory since they began their advance on Marib in 2020.[116] A Huthi-claimed drone attack on Abu Dhabi, finally, drew international ire and talk of new sanctions against the rebels.[117] But these developments have not yet changed the war's overall trajectory and are more likely to make the rivals entrench their positions in the economic conflict than seek compromise.

[113] See Crisis Group Statement, "The U.S. Should Reverse Its Huthi Terror Designation", 13 January 2021.
[114] Crisis Group telephone interviews, UN officials, INGO official, Amman, October 2021.
[115] "Yemen replaces central bank governor, deputy governor amid currency collapse", Reuters, 6 December 2021.
[116] Samy Magdy, "Yemeni government says southern province retaken from rebels", Associated Press, 1 January 2022.
[117] Ghaida Ghantous and Alexander Cornwell, "U.S. condemns deadly Houthi attack on Abu Dhabi; UAE reserves right to respond", Reuters, 17 January 2022.

III. Understanding the Impact of Economic Conflict

A. *The Conflict's Fallout*

Falling income was the main factor depressing ordinary Yemenis' purchasing power during the war's early years. As the economy contracted, many Yemenis lost full-time jobs and sought irregular alternative work, leading to a fall in household incomes and placing stricter limits on budgets for food and other necessities.[118] A series of additional shocks have since pushed basic goods out of reach for many Yemenis.[119] Among these are the cessation of many public-sector salary payments, natural disasters and the COVID-19 pandemic.[120]

The combined hunger-humanitarian crisis does not result from a lack of basic goods, such as food, clean water and medicine, which have been generally available, but from most people's inability to pay for such goods because of lower incomes and higher prices. Rising prices have been the primary problem since 2018. The economic conflict between the government and the Huthis has been an important contributing factor to the resulting increase in living costs. The World Food Programme estimates that the cost of the basic food basket purchased by an average Yemeni family has increased by more than 170 per cent over the course of 2020 and 2021 in government-controlled areas while increasing by 40 per cent in Huthi-held territory.[121]

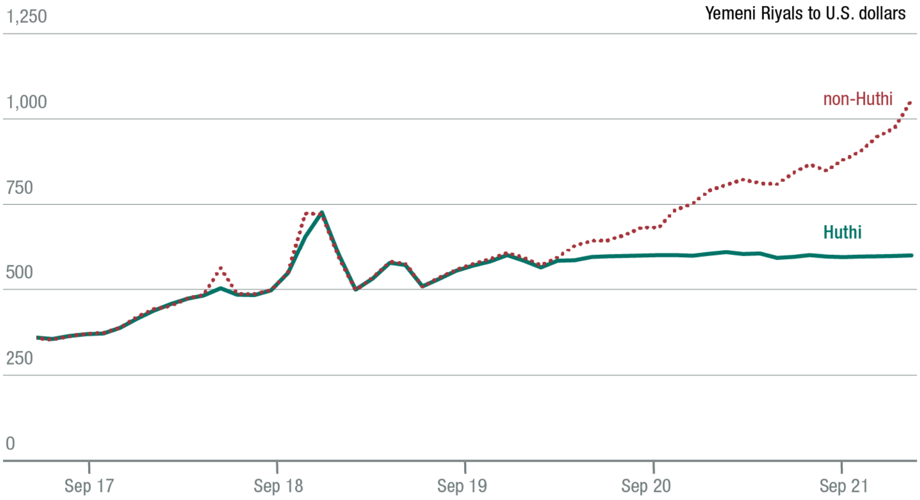
1. The currency split and its effects

The economic conflict's most visible effect is the growing divergence in the riyal's value in different parts of Yemen, which has in turn affected the price of basic goods like wheat and oil. This divergence was triggered by the above-referenced December 2019 Huthi ban on government-printed new-format banknotes. In effect, the move split the country into two economic zones: Huthi-held areas, where "old" riyals are the main currency available; and territory under the government's nominal control where "new" banknotes printed by the Aden central bank have circulated.[122] As Figure 2 shows, the riyal functioned as a single currency in both the Huthi and non-Huthi-controlled economic zones before January 2020. But as noted above, by November 2021, $1 traded for almost 1,500 "new riyals", while the U.S. dollar traded at less than 600 "old riyals" in Huthi-controlled areas.[123] Overall, the riyal has depreciated by about 64 per cent against the dollar since January 2015 in the Huthi-controlled eco-

[118] Sharad Tandon, "When Rebels Attack: Quantifying the Impacts of Capturing Territory from the Government in Yemen", *The World Bank Economic Review*, June 2019.
[119] Sharad Tandon, "Evolution of Poor Food Access over the Course of the Conflict in the Republic of Yemen", working paper, World Bank, April 2019.
[120] Ibid.
[121] "Yemen Food Security Update November 2021", World Food Programme, 21 November 2021. The update estimates that the cost of a "minimum food basket" rose from around 5,000 riyals in January 202 to 13,540 in November 2021 on average in nominally government-controlled areas; and from the same starting point to around 7,084 on average in Huthi areas during the same time period.
[122] "Volatility of the Yemeni riyal", op. cit.
[123] Data viewed via Yemen money exchanger WhatsApp group, May, June, July, October and November 2021. See Appendix A for detail on data sources and analysis.

nomic zone, and by more than 80 per cent over the same period in nominally government-controlled territory.

Figure 2. Riyal-U.S. dollar exchange rates by territorial control actor



Source: World Food Programme Price Data (https://dataviz.vam.wfp.org/economic_explorer/prices)

As mentioned above, the divergence in the value of riyals in the two zones derives in part from mismatched supplies of local currency and foreign exchange in those zones after the Huthi ban. Foreign currency has consistently been available in greater supply in Huthi-controlled areas than in the rest of the country. Most major banks, businesses and money changers are headquartered in Sanaa, the country's historical commercial hub, as are UN agencies and most major international non-governmental organisations, which transfer hundreds of millions of dollars per year into Yemen to fund their operations. As a result, most of the country's hard currency trade still moves through Sanaa, and businesses with foreign holdings are subject to Huthi oversight.[124] The Huthis' principal financial challenge since 2019 has been a liquidity crunch – their authorities lack the physical notes required to keep the economy in their areas running efficiently.[125]

The government's monetary challenges are the mirror image of the Huthis'. Growing income from oil exports and domestic oil and gas sales, and the now-exhausted 2018 Saudi $2 billion deposit, have proven insufficient as sources of foreign currency to cover even the modest volume of imports the government underwrites with letters of credit. Following the Huthi ban on newly formatted riyals, areas under the government's nominal control have also suffered from oversaturation of new banknotes. Making matters worse, to pay salaries and cover operational costs, the government has printed what some of its officials estimate is more than 3 trillion riyals in new banknotes since 2016, a doubling of the money supply compared to January 2015,

[124] The mismatch at least partly explains the government's preoccupation with coercing banks into compliance with its Aden-headquartered central bank's rules even as it struggles to provide stable governance in its areas.
[125] Crisis Group telephone interview, senior official at the Central Bank of Yemen Sanaa, November 2021.

when the central bank last issued money supply data.[126] The Huthis claim that the real figure is 5.32 trillion riyals, which would be a tripling of total money supply.[127] The rebels point to the government's money printing both to explain the riyal's decline and to justify their ban on the new notes, arguing that the new bills are part of a plot to "destroy" Yemen's economy.[128]

The government, in turn, blames the Huthis for the riyal's decline in the areas it controls and argues that it had no choice but to print the new bills in order to pay civil service salaries. It has repeatedly sought to shutter money exchanges it believes are working with the rebels to profit by pushing down the currency's value in areas they hold.[129] While there is likely truth to accusations of currency manipulation, the decision to fund the budget by printing new format bills, in particular, along with economic mismanagement, weak regulation and a general decline in economic output have played more important roles.

Indeed, confidence in the government's abilities as a monetary authority has fallen since the central bank move and the Saudi deposit.[130] Allegations that the government mismanaged the deposit, including a UN Panel of Experts report that alleged money laundering (the findings of which have since been placed under review), have further damaged the government's credibility.[131] As a result, many Yemenis are trying to dispose of unstable new banknotes, further weakening the currency.[132]

The government's appointment of a new central bank governor in December 2021, accompanied by rumours that Riyadh planned on making a new multibillion dollar deposit to the central bank, helped temporarily boost the riyal's value in December 2021 to around 1,000 riyals to the dollar.[133] Absent a new deposit and meaningful reform within the bank, however, the reprieve is likely to prove temporary.

[126] This figure appeared in the government's banking developments newsletter. "Monetary and Banking Developments, Jan. 2015", Central Bank of Yemen, January 2015. Crisis Group telephone interviews, government officials, February and May 2021.
[127] Crisis Group telephone interview, senior Central Bank of Yemen Sanaa official, Sanaa, November 2021.
[128] Crisis Group telephone interview, senior Central Bank of Yemen Sanaa official, Sanaa, November 2021.
[129] "Yemen shuts exchange firms in Aden as currency collapses", *Middle East Monitor*, 3 December 2020.
[130] Crisis Group interviews, Yemeni bankers, businessmen, government bureaucrats, Aden, Marib, Cairo, Amman, UAE, New York and by telephone, 2019-2021.
[131] "EXCLUSIVE: U.N. report accuses Yemen government of money-laundering, Houthis of taking state revenue", Reuters, 27 January 2021; "U.N. monitors backtrack on Yemen money-laundering accusations – document", Reuters, 29 March 2021.
[132] Businesses and ordinary Yemenis holding new riyals often buy old riyals to avoid depreciation and conduct trade with businesses in Huthi-held areas. They do so by working with money changers to first sell these riyals for foreign currency in government-controlled areas before using the hard currency to buy old riyals. Crisis Group telephone interviews, Sanaa residents, February-March 2021; businessmen based in Cairo and Dubai, December 2020-January 2021; Sanaa-based banker, April 2021.
[133] "Yemen replaces central bank governor, deputy governor amid currency collapse", Reuters, 6 December 2021.

2. Wheat prices

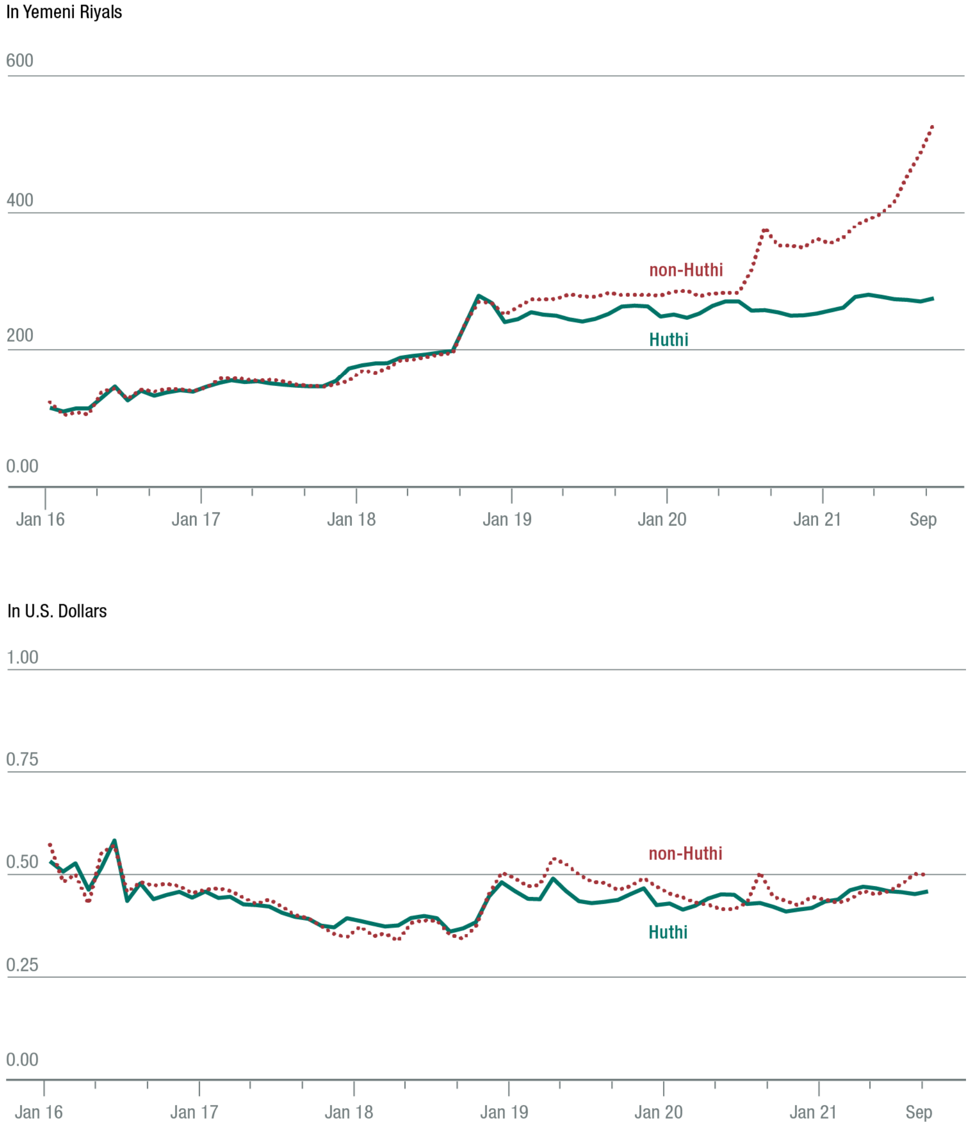
Changes in the price of wheat, more than 90 per cent of which is imported, show the impact of the central bank split on ordinary Yemenis. Consumers buying wheat in Huthi-controlled areas paid 4 per cent more in riyals in June 2021 than in November 2019, just before the currency split in two. But riyal wheat prices increased by 49 per cent in government-held areas during the same period. While four factors could contribute to rising wheat prices – reduced supply, higher global prices, profiteering and the depreciating riyal – the last appears to be the most important.[134]

The figures below illustrate the evolution of wheat prices in government-controlled areas. Before the Huthi ban on the new riyal note, local riyal-denominated wheat and flour prices largely moved in lockstep (Figure 3a). Since the ban, wheat prices have risen more sharply in areas under the government's nominal control than in those held by the Huthis. Wheat flour changed hands in government-held areas at a 22 per cent premium over its price in Huthi-controlled areas in April 2021. Prices have diverged in nominal riyal terms because of the currency's depreciation from late 2019. When market prices are converted back to dollars using local exchange rates that account for the different valuations of the riyal (Figure 3b), they continue to move roughly in unison and in line with market prices.[135] That is little comfort to ordinary Yemenis in government-controlled areas, however, whose buying power in riyals has been badly affected by the currency's decline in value.

[134] "Rising prices continue to make food increasingly unaffordable for many households", ReliefWeb, July 2021.

[135] Although wheat imports fell during the war's first year, they have since recovered to, and at times exceeded, pre-war levels. Import data on file from private trade data-gathering firm. Wheat prices increased by 21 per cent in dollars on global commodity markets between January 2015 and June 2021. But when local wheat prices in Yemen are converted from riyals to dollars at local exchange rates over the same period, they equate to a price decrease of 20 per cent in both Huthi- and non-Huthi-controlled areas. Yemeni businesspeople, traders and officials explain that the wheat market's relative cohesion is the product of pre-war import and distribution networks controlled by a small, oligarchic food-importing elite who have remained key players in the market. Before 2015, these businesses imported and milled wheat, then packaged grain and derivative products ranging from flour to biscuits. These businesses were headquartered in Sanaa, and used industrial infrastructure in Hodeida, Aden, Sanaa and Taiz's Hawban district, which is controlled by the Huthis. Import and distribution networks remain largely intact to this day. Even when wheat is imported to Aden or Mukalla ports, it is often transported to Huthi-controlled areas, where price controls are in place, and onward to Sanaa and Taiz. Not all food commodity prices fell in dollar terms; the cost of rice rose 44 per cent in Huthi-controlled areas and 11 per cent in non-Huthi-controlled areas over the same period (compared to an 11 per cent rise on global markets), while the cost of tomatoes, which are mostly grown domestically, fell 50 per cent in Huthi-controlled areas and 44 per cent in non-Huthi-controlled areas.

Figure 3. Wheat prices by control actor



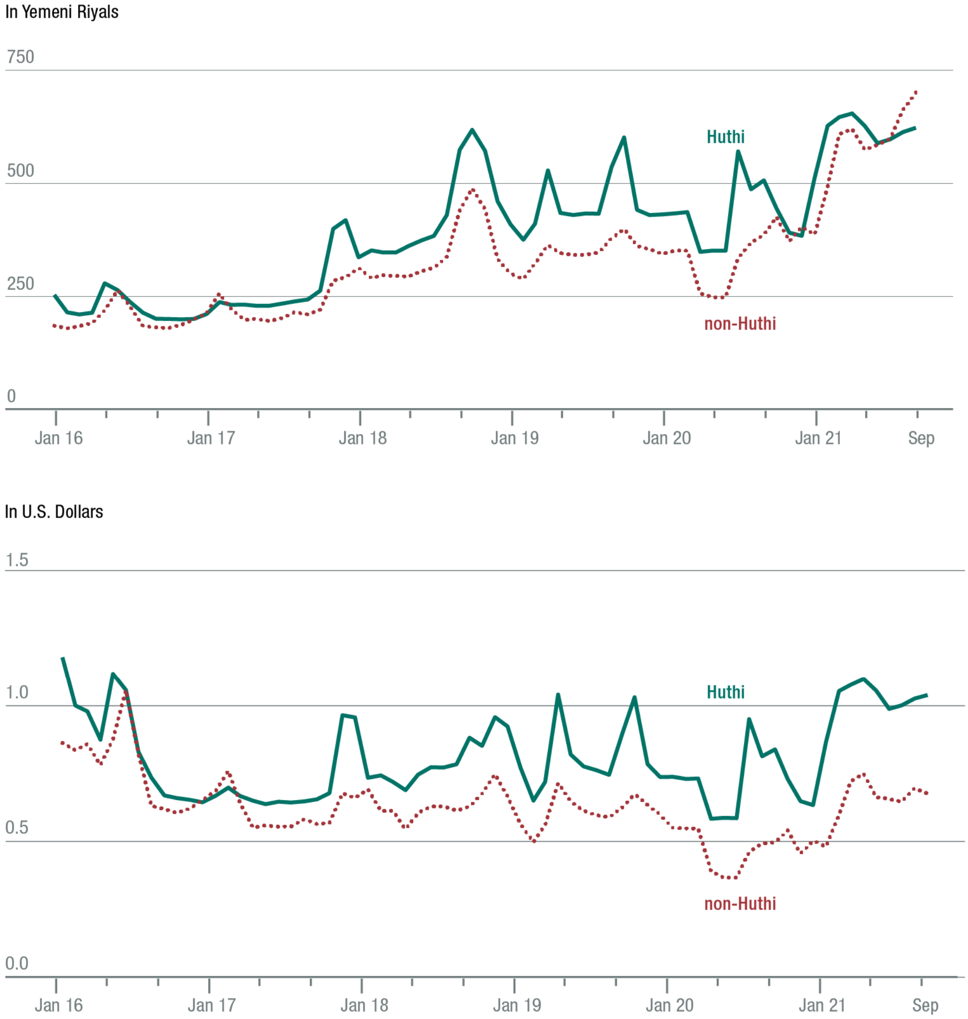
Source: World Food Programme Price Data (https://dataviz.vam.wfp.org/economic_explorer/prices)

3. Fuel prices

After spiking in the war's early days, fuel prices normalised in 2016 but have risen since early 2017. Unlike wheat, fuel pricing was divided along lines of territorial control long before the Huthi currency ban. Whereas food import and distribution networks, which are operated mainly by private-sector actors, remain to this day tightly integrated at the national level, the historically state-run fuel supply chain fragmented down lines of territorial control early on.

Also unlike wheat, the currency's divergence has served to mask – rather than highlight – the differences in pricing in the two economic zones. Riyal diesel prices have been significantly higher in Huthi-held areas since late 2017, with the gap growing consistently from early 2018 onward, coinciding with the Hodeida offensive and the battle over legislative control of fuel imports and currency. It appeared to close somewhat in riyal terms in 2020 and 2021 (Figure 4a), due to the currency's depreciation in government-held areas, but dollarised prices rose significantly in Huthi-controlled areas during this period. When diesel prices are converted to dollars (Figure 4b), prices in Huthi-held areas have risen 34 per cent since January 2018, but prices have fallen by 5 per cent in non-Huthi-controlled areas (versus a 10 per cent increase on international markets over the same period).[136]

Figure 4. Diesel price per litre by control actor



Source: World Food Programme Price Data (https://dataviz.vam.wfp.org/economic_explorer/prices)

Traders, businesspeople and Huthi and government officials offer a range of explanations for this growing gap. The Huthis argue that higher prices in their areas are driven by shortages because of the coalition and government's restrictions on fuel imports at Hodeida port (widely referred to as the fuel embargo), rising shipping costs and demurrage fees imposed on coalition-held vessels, along with double taxation and transportation costs for the growing volume of fuel that first enters government-

[136] Figures from the U.S. Energy Information Administration website.

held areas and is later transported to Huthi-controlled territory overland.[137] The government and its allies claim that there are no shortages in Huthi-held areas and that higher prices stem from Huthi profiteering, a charge the Huthis deny.[138]

Each side appears to be partly correct. Imports into Hodeida in 2020 represented around 35 per cent of Yemen's diesel and motor gasoline supply, and 32 per cent of heavy fuel oil imports, a lower proportion of the total than in the war's early days when more than 50 per cent of all fuel entered via Hodeida. By October 2021, the volume of fuel imports entering Hodeida had halved compared to the same month four years earlier. Just 17 per cent of Yemen's fuel imports came into Hodeida in October 2021, compared to 43 per cent in October 2017, and the proportion was even lower earlier in the year.[139] This change has resulted from some re-routing of fuel and several short but sharp interruptions of delivery from Hodeida; these shocks to the supply chain can only have exacerbated fuel scarcity and therefore pushed up pricing in Huthi-controlled areas.[140]

Yet the government is correct in arguing that, until 2021, trade disruptions around Hodeida were limited; moreover, total fuel inflows to all Yemeni ports increased over the course of 2020 as importers rerouted shipments to nominally government-controlled Aden and Mukalla ports. They were higher in the first ten months of 2021 than the same period in 2019, which should have eased the pain of disruptions at Hodeida.[141] It also seems that the Huthis themselves were responsible for some fuel shipment delays at Hodeida: during August and September 2019, the Huthi authorities at the port held ships in anchorage for an average of almost eleven days in what some traders claim was a rebuke to importers who were complying with government regulations.[142]

Statistical analysis of territorial control and diesel prices suggests that, when all other factors are held equal, Huthi control of a district is associated with a 67 per cent increase in the cost of diesel in dollar terms, compared to what the price would be in the same district if controlled by the government or other local actors.[143] Yet an examination of monthly fluctuation in fuel prices in key Huthi-controlled markets

[137] Crisis Group telephone interviews, Huthi official, February 2021; Huthi official, April 2021; Huthi supporters and affiliates, April and July 2021; senior official at the Central Bank of Yemen Sanaa, November 2021. See also, "The Saudi occupation prevents the entry of commercial ships and fuel to the port of Nishtun", *al-Masira*, 19 October 2020 (Arabic).

[138] The government's Supreme Economic Committee claims that 60 per cent of fuel imports to Aden and Mukalla found their way to Huthi-controlled areas in 2020, rising to 70 per cent by mid-2021. Crisis Group interviews, government official, Riyadh, March 2021; Economic Committee official, Cairo, January 2021. See also Aziz Al-Ahmadi, "Houthis blame Saudi-led coalition for Yemen crises", Anadolu Agency, 1 February 2021.

[139] Data provided by a private trade data-gathering firm. On file with Crisis Group.

[140] An unpublished World Bank paper argues credibly that supply chain disruptions have played a significant role in driving economic insecurity in Yemeni households over the course of the conflict. On file with Crisis Group.

[141] Fuel import volumes for the first four months of 2021 increased compared to the same period in 2020. Data provided by a private trade data-gathering firm. On file with Crisis Group.

[142] Several fuel tankers were forced to wait for as many as 29 days in April-December 2019, despite Huthi claims of urgent fuel shortages. Figures compiled by C4ADS, a Washington-based NGO. On file with Crisis Group.

[143] For methodology, see Appendix A.II.

casts doubt on the Huthi claim that the cost differential is purely due to shocks to the Hodeida fuel supply. While such a shock appears to have caused fuel prices to jump in Sanaa during the initial naval blockade in 2015 and then during a short November 2017 supply interruption caused by an announced Saudi blockade of Hodeida, there was a persistent if much narrower gap between prices in Huthi-controlled and other areas of the country throughout periods when there were no such blockade-induced shortages (Figure 4).

In general, high fuel costs in Huthi-controlled areas appear to result from a combination of factors, of which the embargo is only one. These include higher global prices, the riyal's depreciation, supply disruptions because of the embargo, double taxation (because fuel is being taxed at the port of entry and then at Huthi-controlled inland customs points), higher transport costs and, more than likely, Huthi profit seeking through increased retail prices.

B. *The Hodeida Strategy and Its Failings*

The Hodeida fuel embargo has brought some financial and other benefits to the government, generating relatively small amounts of customs revenue and forcing the Huthis to depend on supply lines traversing territories its rivals control. At the same time, it is also demonstrably not helping weaken the Huthis financially or economically; it is most visibly rebounding on ordinary Yemenis. But the government, rightly or wrongly, believes that the Hodeida embargo provides it with much-needed leverage over the Huthis, even as its own international image, and that of Saudi Arabia, is increasingly tarnished by what appears to be the collective punishment of the twenty million or so Yemenis living under Huthi rule.

Imports entering Hodeida declined over the course of 2021 as the result of both government regulations on imports and the fuel embargo. On average, Hodeida accounted for 8 per cent of Yemen's fuel imports in the first ten months of 2021, a sharp decline from previous years.[144] Ports under the government's nominal control, principally Aden and Mukalla, benefited from the Hodeida decline. By October 2021, Aden accounted for more than 60 per cent of all fuel entering Yemen.[145] The government earned 100 billion riyals from duties levied on fuel in the first six months of 2021, according to a senior government official.[146] At local exchange rates, this sum would be equivalent to about $100 million, or $16.6 million per month, and should net the government roughly $200 million for the year from these ports. The sum compares favourably to the 120 billion riyals the government says it earned from fuel imports in the entirety of 2020. Government income is now similar to what Hadi officials believe the Huthis earned from fuel taxes and customs at Hodeida port in 2019 and 2020.[147]

[144] Data provided by a private trade data-gathering firm. On file with Crisis Group.
[145] Ibid.
[146] Crisis Group telephone interview, government official, July 2021. Also note on file with Crisis Group.
[147] The Huthis recorded revenues of around 39 billion riyals in the joint account at the Hodeida central bank during the four months when the temporary fuel mechanism was in place, or $16.25 million per month at the prevalent exchange rate in Huthi-controlled areas. Crisis Group telephone interviews, government official and UN official, July 2021. Also note on file with Crisis Group.

But the victory is likely hollow, as it is unclear how much of this income accrues to the government, given that the Aden and Mukalla ports are controlled by local forces that in the past hung on to local revenues.[148] Moreover, as a former government official noted: "I doubt that either a few weeks without fuel or $200 million a year is going to change the course of the war. It's a small victory at a big political cost".[149]

Furthermore, the embargo has not damaged the Huthis operationally, in large part because fuel appears to be flowing into Huthi areas despite the falling volume of imports to Hodeida. Since it began, the Huthis have made significant territorial gains.[150] In 2020 and 2021, a number of allegedly Huthi-affiliated fuel importers began to bring in quantities of fuel via nominally government-controlled ports at Aden and Mukalla.[151] Traders and local merchants report seeing large volumes of fuel being transferred from government-held ports to Huthi-controlled areas. Because fuel prices are higher in the Huthis' economic zone and the old riyal is largely stable there, merchants in government-held areas, where prices are lower and the currency is less stable, have a strong incentive to sell fuel into Huthi-controlled areas.

Nor is the embargo hurting the Huthis' financial bottom line. Senior officials in Sanaa say customs, tax and other revenues are largely unchanged in 2021 compared to 2020.[152] The government's focus on customs revenues fails to take into account how the Huthis make money. The rebels' economic power increasingly derives from controlling the country's main population centres, as well as their ability to control and set prices in local markets. Huthi-controlled areas are home to around 70 per cent of the country's population (10 per cent in Sanaa alone), if not more, and hence its major markets.[153] Moreover, the Huthis operate something akin to a police state in northern Yemen, exerting strong control over locals including businessmen. This degree of control over their areas allows the Huthis to regulate prices in local markets in a way the government cannot match.[154]

A Yemeni researcher characterised the Huthis' zone of control as a "walled garden", noting that ironically the more isolated Huthi areas are, the more influence the group has over the local economy, and the greater freedom it has to extract money via taxes and sales of goods like fuel at a markup.[155] This control has also allowed them to set prices for fuel to their benefit. In July 2018, the Huthis reversed their above-

[148] Crisis Group interviews, government officials, central bank staff, local authorities, Aden, Mukalla, Marib and by telephone, March 2019; January, October and November 2020; and February-March 2021.
[149] Crisis Group telephone interview, Yemeni researcher, January 2021.
[150] See Crisis Group Briefing, *After al-Bayda, the Beginning of an Endgame for Northern Yemen?*, op. cit.
[151] Crisis Group review of data held by a private trade data-gathering firm comparing shipment financiers, with note on file outlining major Huthi fuel importers.
[152] Crisis Group interview, senior official at the Central Bank of Yemen Sanaa, November 2021.
[153] Based on Crisis Group estimates comparing district-level control with data provided by the Integrated Food Security Phase Classification Population Tracking Tool.
[154] The government's economic strategy of wresting control of the economy from the Huthis would have worked, a former senior central bank official said wryly, had it only pulled off the impossible feat of moving "this 70 per cent of the population from Huthi areas to Aden". Crisis Group telephone interview, former senior central bank official, April 2021.
[155] Crisis Group telephone interview, Yemeni researcher, January 2021.

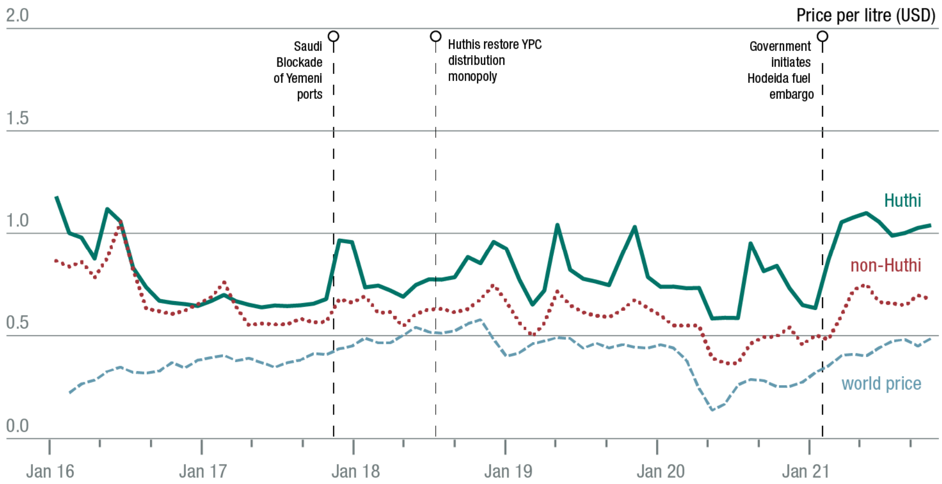
referenced earlier liberalisation of fuel markets, ending the private sector's role in selling fuel to consumers. The Huthi-controlled Yemen Petroleum Corporation, restored as the sole authorised distributor in Huthi areas, began paying importers a set price for fuel shipments arriving at Hodeida and internal customs points. It sells the fuel at its own gas stations.

The Huthis also play an important role in setting prices in a grey market that operates alongside formal state-run fuel stations. Grey market vendors who would not be able to operate without the Huthis' tacit approval maintain supply at informal locations during shortages, selling fuel at significantly higher prices than are charged at state-run fuel stations. As a result, the Huthis now control, and profit from, each link in the fuel supply chain.

Since restoring the Yemen Petroleum Corporation's fuel distribution monopoly, the Sanaa de facto authorities have generated more revenues from selling fuel directly to consumers than from customs duties, taxes and other fees levied at Hodeida combined.[156] During this period, the dollar margin between global fuel prices and the cost at Huthi-controlled gas stations has widened (Figure 5). Conservatively, the Huthis earned around $524 million from taxes and other fees on fuel and point-of-sale revenues for diesel and gasoline in 2020.[157] This amount is more than half of all revenues the Huthis reported collecting in 2019.[158] The bulk of Huthi fuel income in 2020 and 2021, in other words, likely came not from taxes and fees at Hodeida, but from their control of the supply chain and sales via the Yemen Petroleum Corporation and the parallel market.

[156] Based on a wide range of official statements, publicly available data and data gathered by private sources shared with Crisis Group. The Huthi authorities earned approximately $40 million from taxes, customs and other fees levied on diesel imports entering Hodeida in 2020, whereas the total profits earned by the Huthis on diesel imported to Hodeida were an estimated $220 million. Supply-chain revenue figures are based on official fuel prices, which are often significantly lower than prices in the parallel market; actual income generated through fuel sales in Huthi-controlled areas is likely significantly higher. Residents of Huthi-controlled areas note that fuel is available on a Huthi-sanctioned parallel market at a significant markup from prices at fuel stations run by the Huthis' de facto authorities, generating much higher revenues than Crisis Group estimates, which are based on official local prices. Crisis Group telephone interviews, Huthi-controlled area residents.
[157] This figure is based on a conservative estimate of point-of-sale revenue and liberal estimates of transportation and other distribution costs; it tallies with estimates made by ACAPS. See Appendix A.III for further detail on assumptions and methodology.
[158] The Huthis have not released an estimate of revenues for 2020.

Figure 5. Diesel price per litre by control actor versus world price in U.S. dollars



Source: World Food Programme Price Data (https://dataviz.vam.wfp.org/economic_explorer/prices)

Huthi officials and supporters deny that their side has artificially inflated prices in the areas the group controls, citing transportation costs and double taxation as explanations for the price hikes.[159] But the Huthis' account of the fuel price dynamics in their areas does not add up entirely. Even when these factors are accounted for, at a minimum the Huthis have been able to maintain an income from fuel in 2021 similar to 2020 despite the Hodeida embargo, negating its effects. Using the same estimates above, which account for transportation costs and double taxation, Huthi revenues from diesel and gasoline imports and sales were $219 million amid rising prices in their local market in the first four months of 2021.[160] If the Sanaa authorities were to sustain similar revenues through 2021, they would earn an estimated $657 million over the course of the year, a $153 million, or 29 per cent, increase over 2020.[161]

Thus, by disrupting supply into Hodeida, the government did little to benefit itself financially and made itself the scapegoat for supply shortages, even if they were partly manufactured by the Huthis, and price hikes that were not in fact wholly its fault. In a war that is often fought through narratives, the Huthis have been able to come out on top by telling a story of victimhood. At the same time, Huthi income may well have increased as a result of its actions in the face of the Hodeida embargo. The government now finds itself in a bind: if it allows trade to flow freely through Hodeida, the Huthis will likely benefit economically while cutting the cost of living in its areas,

[159] Crisis Group telephone interviews, Huthi officials, October 2021; Huthi supporter with ties to the leadership, October 2021; senior official at the Central Bank of Yemen Sanaa, November 2021.
[160] See Appendix A.III for further detail on assumptions and methodology.
[161] In their efforts to prove that the fuel embargo should not have led to higher prices in Huthi areas, Hadi officials claim that 60 per cent of fuel entering ports under the government's nominal control was transported into Huthi territory in 2020, a figure they say rose to 70 per cent by mid-2021. If correct, these government estimates indicate significantly higher Huthi profits from fuel sales than Crisis Group's conservative estimates: a potential $697 million in 2020 (33 per cent higher) and a potential $996 million for 2021 (52 per cent higher). Under these assumptions, Huthi fuel-related profits would have increased by $329 million or 47 per cent year-on-year since the embargo began in earnest. See Appendix A.III for detail on calculations.

selling more fuel imported via Hodeida (albeit at a lower margin, if prices are cut to mollify the local population). But if it sustains the embargo, the Huthis can make large sums of money through the arrangements they have created in response, while blaming the government for higher prices as its international image is further tarnished.

C. *The Government's Weakening Position*

On the other side of the Huthis' garden wall, the situation in territory nominally controlled by the government is in deep disorder and may deteriorate further because of the Hodeida embargo and the Marib fight.

The combination of fuel shortages, the currency crisis and worsening humanitarian conditions is deepening divisions among anti-Huthi elements. Fuel and electricity shortages combined with a collapsing currency and the resulting skyrocketing cost of living in Mukalla, Shabwa, Aden and Taiz have led to sustained and often violent protests against government economic mismanagement. The STC has accused the government of waging a "war of services" in its areas, deliberately making conditions unbearable as a way to undermine its cause.[162] Protests by pro-independence southerners over the declining economy and a lack of services have in turn precipitated violence between government-aligned forces and STC supporters.[163]

Government authorities have tried to stabilise the situation but to little avail. In October 2021, the central bank in Aden initiated new measures to slow down the riyal's decline, including by suspending the work of exchange companies and releasing new banknotes into the market.[164] But continued volatility sparked widespread protests.[165] Crowds protesting the currency's decline in Taiz, where the government has previously enjoyed some support, called for President Hadi to be removed.[166]

Food insecurity also continues to rise. According to the World Food Programme, a similar proportion of the population in Yemen's two economic zones, just under 40 per cent, were not getting enough to eat in August 2020. By November 2021, this percentage was largely the same in Huthi territory and had risen to 48 per cent in non-Huthi areas.[167]

In addition to being a source of instability, the government's tensions with the STC and other anti-Huthi elements have undermined its efforts to convince big businesses to relocate to Aden (where authority is still unclear following the STC's August 2019 takeover, after which the STC physically controlled the city with the government maintaining a light-touch presence there) from Sanaa. The Hadi-STC spat comes on top of the business risks created by rampant inflation, currency depreciation and the possibility that relocating from Sanaa to Aden would mean severing ties with the

[162] Crisis Group telephone interview, STC official, May 2021. See also "Al-Zubaidi accuses the Yemeni government of waging a war of services and disrupting the Riyadh Agreement", Debriefer, 21 May 2021.
[163] Aziz Yaakoubi, "Temperature rising in south Yemen as rivalries fuel power shortage", Reuters, 7 June 2021.
[164] "Yemen… Central Bank suspends licences of 54 money exchange companies", Anadolu Agency, 16 October 2021 (Arabic).
[165] "Closure of exchange shops in Wadi Hadramawt", *al-Mushahid*, 13 October 2021 (Arabic).
[166] "Taiz… Hundreds protest against the deterioration of the local currency and demand the dismissal of the government", *al-Mahra Post*, 16 October 2021 (Arabic).
[167] World Food Programme data on file with Crisis Group.

Huthis, leaving businesses unable to operate in the country's biggest and most lucrative markets.[168]

While these developments have already eroded the government's position relative to the Huthis', the situation could deteriorate further still. If the Huthis were to seize control of Marib city or the nearby state-run oil, gas and electricity facilities, they would gain a significant economic advantage, as they could then profit from fuel and gas sales and reduce the hard currency cost of fuel imports for their areas. They would also be well positioned to improve their standing with the population living in areas under their control by bringing down the cost of fuel, improving the exchange rate, and providing regular electricity supply to Sanaa and its environs for the first time since the war began.

While the government is hardly responsible for all of the setbacks it has faced – and the fundamental causes of Yemen's economic and humanitarian morass are decades of economic mismanagement and corruption followed by seven years of brutal, destructive war – it has not always helped its situation. Diplomats, government officials, businesspeople and other Yemeni observers broadly agree that the government has consistently – and often counterproductively – put damaging the Huthis over getting its own house in order. In doing so, it has undermined the moral high ground it initially occupied in the eyes of partners as a result of its international legal status as Yemen's sovereign authority. The government has also faced repeated accusations of economic mismanagement, malfeasance and under-regulation.[169] The central bank reportedly lacks anti-money laundering and counter-terror finance capacity, making foreign banks and donors wary of cooperation.[170] Asked to sum up the challenges that faced his side, a former government central bank official noted wearily:

> The strength of the Huthis is the weakness of their enemy. When the government is not working well, the Huthis look good. And if the government continues to be weak, they will continue to look even stronger, and for this reason the war will continue.[171]

[168] Businesses making such a move might also be cut off from port facilities in Hodeida and the Hawban district of Taiz, which remains the country's industrial hub.
[169] "Yemen's central bank dismisses UN corruption allegations", *The Independent*, 28 January 2021. A January 2021 UN Panel of Experts report – since placed under review – accused the bank and Yemeni businesses of cronyism and fraud. "Final report of the Panel of Experts on Yemen", UN Security Council, S/2021/79, 29 January 2021. While the businesses named in the report, and the central bank, have denied the allegations, numerous bank officials argue that the panel's findings were broadly correct in their diagnosis of the problem, if not in labelling prevalent practices as money laundering per se. Crisis Group telephone interviews, government and central bank officials, February 2021.
[170] Sherine El Taraboulsi-McCarthy and Camilla Cimatti, "Counter-terrorism, De-risking and the Humanitarian Response in Yemen: A Call for Action", Overseas Development Institute, February 2018.
[171] Crisis Group telephone interview, central bank official, March 2021.

IV. Diplomatic Doldrums

From early 2020 onward, the UN sought to deal with two interlinked problems with deep economic dimensions: the Huthi offensive on Marib and the continued standoff over Hodeida.

As the battle for Marib waxed and waned in early 2020 and the coronavirus spread, the UN redoubled its efforts to at least bring a temporary halt to the war. At the time UN Secretary-General António Guterres called for a global ceasefire to allow for a co-ordinated international response to the COVID-19 pandemic on 23 March, his special Yemen envoy, Martin Griffiths, was attempting to negotiate a cessation of hostilities around Marib.[172]

Mismatched expectations and hostility from both sides hampered the effort from the outset. The government, which at the end of 2019 had argued against further "single-issue" agreements with the Huthis in the mould of the Stockholm Agreement that had fended off a battle for Hodeida the previous year, demanded a unilateral Huthi ceasefire and withdrawal from areas the movement had seized since the beginning of the year. The government also, at first, refused reciprocal concessions.[173]

The Huthis, for their part, made it clear that they were similarly uninterested in limited deals like the Stockholm Agreement. They stipulated instead that any future agreement include a comprehensive roadmap for ending the war and initiating political talks over the country's future. They demanded, as they have since the war's early days, that any ceasefire include an end to what they term the siege of their areas (the closure of Sanaa airport and restrictions on trade flows into Hodeida) which they see as part and parcel of the Saudi-led coalition war effort.[174]

Over the course of 2020, UN Envoy Griffiths and his team sought to broker a deal that packaged the government's call for a ceasefire, the Huthis' demands for the end of what they termed the siege of the Hodeida ports and Sanaa airport, and the mediators' own hopes for national political talks into a single initiative: the push for a Joint Declaration that would achieve these goals.

The UN proposal called for a nationwide ceasefire first, including a halt to aerial and maritime attacks, to come into effect within 72 hours of the document's signing by both parties.[175] The agreement also stipulated what the UN described as humanitarian confidence-building measures: the formation of a joint cell to work on a coordinated response to COVID-19, and for the release of prisoners of war and other detainees held by the parties over the course of the war. It also laid out a series of further eco-

[172] "Yemen: UN envoy calls for 'immediate and unconditional' freeze on military activities", UN News, 7 November 2020.
[173] Crisis Group interviews, senior Yemeni government officials, Amman and Cairo, September 2019 and January 2020. See also Khaled Al-Humairi, "The Yemeni government calls for a ceasefire and opening of the crossings in Hodeida", *al-Mushahid*, 14 July 2019 (Arabic).
[174] Crisis Group interviews, Huthi representatives, Sanaa and Muscat, March, July and October 2020.
[175] Shuttle negotiations during this period yielded multiple drafts of an agreement. Two drafts, one in English, the other in Arabic, from August and September 2020, respectively, are on file with Crisis Group. The ceasefire would be overseen by a Military Coordination Committee, made up of military representatives of both parties and chaired by the UN, and would in turn form governorate-level ceasefire committees. As part of the ceasefire, the agreement also calls for the reopening of access roads throughout the country, notably those around Taiz city, Hodeida, Marib, Saada and al-Jawf.

nomic confidence-building steps: first, a framework for a joint salary payment mechanism, to pay civil servants across the country regardless of controlling authority, which also had been part of the Stockholm Agreement; then, an end to restrictions on imports entering through Hodeida; and lastly, a plan to reopen Sanaa International Airport to commercial flights.[176]

During shuttle negotiations that began in March 2021, the government at first rebuffed the UN proposal, seeing it as attempting to relitigate the Stockholm Agreement in favour of the Huthis, and concerned about what they perceived as Huthi efforts to use the deal to secure legal authority over the ports and airport.[177] The Stockholm Agreement talks had left Yemeni officials wary of UN negotiators' use of "creative ambiguity" to forge the impression of consensus.[178] The Huthis and the government had left Sweden with wildly different interpretations of the deal, which each claimed was supported by the way UN negotiators had represented what they were agreeing to. Both sides soon had misgivings about the vague language used in the final text and lack of a dispute resolution mechanism.

While shuttle negotiations over the Joint Declaration had largely ground to a halt by late 2020, in February 2021, the new Biden administration gave mediators some reason for hope when it threw its weight behind UN efforts.[179] At first, UN officials thought that U.S. pressure on Riyadh might convince the Saudis to lean on the government to make concessions on the ports and airport. Yet it quickly became clear that by the time the Biden administration got behind the initiative, it was already dead in the water.

At present, the parties' positions are far apart. For their part, the Huthis have suggested they will consider talks about a nationwide ceasefire after a separate agreement that ends restrictions on Hodeida port and leads to Sanaa International Airport being reopened. The Huthis have also been clear that when they speak of negotiating a ceasefire, they mean a halt to the cross-border war with Saudi Arabia and other coalition partners and the departure of foreign troops from the Yemeni battlefield, but not a halt to the civil war that has manifested itself in front-line fighting in Marib and elsewhere. The government and Saudi Arabia consider this notion of ceasefire a non-starter.[180]

---

[176] Drafts of the Joint Declaration on file with Crisis Group.
[177] Drafts of the agreement show a progression from a broad agreement to "[p]romote and facilitate the entry of commercial container ships to Hudaydah port" in April 2020, to a more detailed description of "lifting restrictions on the entry of commercial container ships" that would mean cutting out the government and Saudi approvals of shipments once UNVIM had cleared them.
[178] Government officials claim the UN, misleadingly, had assured them that the Stockholm Agreement – which says undefined "local security forces" should take control of the city – provided for the government to regain control of Hodeida. For this reason, they say, they now insist on detailed agreements on the ports and airport, which the UN has been unable to deliver as part of its mediation efforts. They also reject what they see as the UN's overall approach to the talks, which, they say, assumes parity between the government and the rebels. Crisis Group interviews, government officials, Cairo, February 2021; New York, March 2021.
[179] Alexandra Stark, "Biden announced a major policy shift on Yemen. What happens now?", *The Washington Post*, 8 February 2021.
[180] Crisis Group telephone interviews, government official, January 2021; Saudi official, February 2021.

As for the Hadi government, it continues to resist proposals that it sees both as chipping away at its internationally recognised sovereignty, and as asking it to give up its remaining leverage with the Huthis for what government officials see no return beyond, at best, a temporary halt to a war it is clearly losing. The government perceives that its control over Hodeida port and the airport are among the few bargaining chips it has in negotiations with the Huthis. Perhaps because they lack any other form of leverage with the Huthis, government officials have resisted arguments from UN officials and other diplomats that the Hodeida fuel embargo is counterproductive, and that reopening Sanaa airport and lifting restrictions on Hodeida would in any event be reversible in the event of Huthi backsliding. They also appear unmoved by the backlash to the embargo that has mounted at the UN and in some quarters in Washington.[181] A government adviser told Crisis Group:

> We are not stupid. We are being asked to give up all of our leverage. And if we try and put these measures back afterward, we will be attacked and pressured not to do it. So, we will be handing our sovereignty over to the Huthis, and of course they will not stop at Marib.[182]

There are likely more fundamental reasons besides. Simply put, by mid-2021, many UN officials and diplomats saw the Huthi-government disputes over the contents and sequencing of the proposed deal as an excuse to avoid negotiations that neither side believes are in its interest. The Huthis have for some time believed they have the upper hand in the war and, until January 2022 at least, anticipated victory in Marib, which would strengthen their bargaining and likely leave the government mortally wounded.[183] Government officials fear that any negotiation that would lead to a compromise on government sovereignty over the country's ports and airports would spell the beginning of the end for President Hadi.[184] They also no doubt fear that Hadi will be removed as part of any national political settlement. Many foreign diplomats agree that the formation of a unity government, which is a principal political aim for the UN, is more likely to mean the absorption of Hadi government officials and local administrations into Huthi institutions than vice versa, given the government's weakness and the Huthis' relative strength.[185]

The UN and outside powers appear increasingly confounded by the question of how they should approach Hodeida and the economic file. UN and other mediators are struggling with the extent to which the war economy, questions of sovereignty,

[181] In Washington, a vocal section of Congress has laid responsibility for Yemen's economic situation at Riyadh's feet and started pressing U.S. officials to find a solution. Ryan Nobles, "Congressional Democrats call on Biden administration to demand Saudi Arabia lift blockade on Yemen", CNN, 7 April 2021. At the UN, pressure is growing on the U.S. and other Western governments to persuade the Saudis to allow all ships with UNVIM clearance to enter Yemeni waters unmolested. Crisis Group telephone interview, Western diplomats, June and July 2021. A U.S. official said: "I really don't understand what they hope to achieve with this [the fuel embargo]. It is utterly self-defeating". Crisis Group interview, U.S. official, June 2021.
[182] Crisis Group telephone interview, government adviser, December 2020.
[183] Crisis Group telephone interview, Huthi representative, May 2021.
[184] Crisis Group telephone interview, government official, October 2021.
[185] Crisis Group interviews, diplomats, New York, March and September 2021. Crisis Group telephone interviews, diplomats, January, March and October 2021.

humanitarian concerns, and military and international political calculations are intertwined. The UN's initial framing of the initiative's different components – treating solutions for the Hodeida and Sanaa airport problems as "confidence-building measures" to be achieved through U.S. pressure on Riyadh – looked at these highly contentious, politically inflected issues as low-hanging fruit that could be addressed through quick technical fixes. The initiative thus disregarded the government's perspective and likely sowed the seeds of its own demise.

Going forward, if the fighting is to be stopped the same mistake cannot be made again. Even if the parties are motivated more than anything by winning the war and gaining sovereignty over as much of the nation's territory as they can manage, the economy is a crucial piece of the puzzle. Under-examining the war's economic facets – and failing to better take into account the economic conflict when considering mediation strategies – unnecessarily limits the UN's ability to navigate the parties' strategies. It will also erect barriers to progress when time is short.

A Western diplomat summed up the challenge as follows:

> It's going to be hard to address the war's economic aspects until there has been a political deal and new political arrangements; otherwise, why would the government give up their most important lever? But then for the Huthis, it is the most important issue and central to a ceasefire.

In order to break the impasse around these issues a new approach will likely be required.

V. Moving Toward an Economic Ceasefire

The economic conflict is not the only factor driving Yemen's war or preventing its resolution. The war is a complex, multiparty conflict rife with local and regional rivalries. But as stalled efforts to implement the Stockholm Agreement and negotiate the Joint Declaration made clear, the shooting war in Yemen cannot be resolved without a parallel effort to address the economic issues that shape the parties' political and military calculations, underlie the country's humanitarian crisis, and relate to essential questions of sovereignty.

This task will hardly be easy, with the conflict parties seeing the economic conflict as a zero-sum struggle for the sovereign authority to control, tax and regulate trade and to reap the financial benefits thereof. But the UN has encountered a challenge of this nature before. In other UN-led peace processes, such as in Libya, where the UN operates an "integrated" mission structure, UN envoys have developed mediation tracks to deal with conflicts' economic dimensions as part and parcel of their overall conflict resolution approach.[186] UN officials focused on peacebuilding analysis in New York see such structures as "best practice" for UN political missions.[187]

Against this backdrop, the UN's new Yemen envoy, Hans Grundberg, who took office in September 2021, is considering ways his office can address the conflict's economic dimensions, already signalling his interest by recruiting an economic affairs officer to the team. Perhaps the most important step he could take, drawing a page from the Libya precedent, would be to establish a formal economic consultation and mediation track. This track would bring together the envoy's political heft and the expertise of a yet-to-be-hired team in order to identify solutions for economic issues that are bound up with the most sensitive political issues driving the conflict and have thus far proven intractable.

In giving the team its marching orders, the new envoy should look to how the UN has prepared to deal with the war's military dimensions. In late 2019, Martin Griffiths brought a British military expert onto his team to develop a detailed, phased ceasefire plan that envisioned an initial truce, conflict management mechanisms, de-escalation measures, interim security planning, and an innovative series of cooperative agreements among military forces and local groups.[188] While the parties can carry out few if any of these plans until they are much closer to a settlement, negotiators can draw upon the ideas therein when politics allow for a ceasefire.

Following this model, the envoy's office could use the economic track to prepare for the economic equivalent of a ceasefire, while also looking for issues where progress might be possible even before the parties are ready to bring fighting to a halt. The ultimate objective would be an overarching agreement by the conflict parties to halt efforts to damage each other economically; to cooperate with one another to use the economic levers at their disposal to improve the lot of ordinary Yemenis; and to create a so-called peace dividend – economic growth coupled with improved service delivery – that would be used by the parties to generate popular support for a political

[186] See Crisis Group Middle East and North Africa Report N°222, *Libya Turns the Page*, 12 May 2021.
[187] Crisis Group interview, UN Peace and Mediation Division official, New York, October 2021.
[188] Crisis Group telephone interviews, UN officials, March, May and June 2021.

settlement to at least temporarily end the war. It would also lay the groundwork for the gradual reintegration of the economy and state institutions, to the extent that the country's factious politics allows.

Concretely, the key elements of such an agreement would need to grapple with, as a matter of priority, revenue collection and salary payments, government-imposed limits on fuel imports to Hodeida, the Huthis' ban on new riyal notes and, relatedly, government regulation of the notes it has printed, along with domestic and international deconfliction mechanisms for bank regulation across the different zones of control. As outlined above, these are the issues of greatest importance to – and with the greatest impact on – ordinary Yemenis' day-to-day lives.

To begin moving in this direction, the economic team could start by identifying the key disputes within each of the areas described above and related topics – from import restrictions to competing currencies – working in coordination, where possible, with their humanitarian agency colleagues and officials at the World Bank, International Monetary Fund and other international organisations. They would then need to identify the decision-makers on all sides who could negotiate an economic truce and agree on the necessary steps toward de-escalation, in particular around the banking and import sectors, and concerning Hodeida and all of Yemen's airports. Much as the UN has identified prospective members of a military committee to plan a ceasefire, it will need to convince the economic war's decision-makers to engage in UN-led consultations now and, later, to form their own committee to coordinate an economic truce.

As is the case with the military ceasefire, these consultations cannot be limited to the two parties identified in UN Security Council Resolution 2216. All parties with a stake in and control of resource and trade centres will have to be involved at a minimum in the consultations, but ideally in the negotiation of an economic truce as part of a broader settlement. The STC is one such party; others are local authorities or representatives from Taiz, Marib, Shebwa and Hadramawt; and still others might be military authorities on the Red Sea coast, along with key private-sector actors (as discussed further below).

Once the UN has initiated these consultations, it should identify aspects of the economic conflict that can be at least partially addressed in the near term, and those that can only be resolved as part of a political process that settles questions of sovereign authority. For both purposes it will be important to adopt a coordinated rather than unified approach – that is, getting different economic institutions and bodies like the rival central banks to work with one another rather than pushing for one set of integrated national institutions straight away. The extent of Yemen's political, military and territorial fragmentation as well as the deep-rooted grievances shared by the numerous rival parties mean that an attempt by any central authority to assert its authority over all Yemen will almost certainly lead to rebellion by one group or another and renewed conflict.

It will also be important to ensure that de-escalatory measures are negotiated at the appropriate level of detail and agreed upon at a senior political level rather than sketched out in generalities with details delegated to mid-ranking officials who lack decision-making power, and that robust dispute resolution mechanisms are put in place. As noted above, prior arrangements that lacked these, including the Stockholm Agreement and the temporary fuel import mechanism negotiated in 2019 and

2020, are widely regarded to have failed in part because of loose wording, which negotiators chalked up to constructive ambiguity, but which left the parties to quibble with the deal's meaning once inked.[189]

In practice, the UN team should proceed through consultation and mediation. It should initiate discussions on tax and customs at ports and internal customs points and checkpoints, and on revenues generated by selling oil and gas on local and international markets. It should consult with and then attempt to foster dialogue between the rival central banks and finance ministries. It should also develop a deep understanding of the rival parties' budgetary structures, in particular their wage bills, and to look for areas of potential common interest on both sides of the conflict divide, like gaining greater capacity to pay teachers and medical workers. The team should share feedback from these consultations with the envoy, who will likely need to constantly advocate for dialogue on the economy with senior Yemeni political leaders and regional officials. Because those leaders and officials are unlikely to agree to discussions that they think could hurt their bottom line or improve their rivals', another important task will be identifying the payoffs and incentives for compromise.

For example, by allowing new banknotes, people, goods and hard currency to flow between their and rival areas, the Huthis would be surrendering considerable control over their walled garden economy.[190] But such a move could help resolve their internal liquidity problems and increase economic activity in Sanaa, cementing the city's status as the country's economic centre of gravity. For its part, the government would benefit by improving the riyal's value against the dollar in areas under its nominal control.

Efforts to de-escalate and then end the economic conflict will invariably be plagued by the same issues that have made a political settlement impossible until now. The UN envoy can do two things to facilitate work along the economic track: first, he can consult, and where possible include, interested private-sector parties in negotiations. It is in the interest of Yemen's major importers and banks (most of which are partly or mostly owned by the importers) to improve the flow of goods and funds in and out of Yemen. Private-sector actors have often walked a fine line with the conflict parties, but they are among the few groups that have maintained regular, if at times unsteady, relations with both the Huthis and the government. Their input and assistance will be invaluable. But the UN will need to approach its interactions with private-sector players carefully, given how politically sensitive the economy has become and the parties' willingness to punish businesses they believe are politically slanted toward their rivals.

[189] Ibrahim Jalal, "Yemen's Stockholm Agreement One Year On: Imaginary Progress?", Middle East Institute, 22 January 2020.

[190] In some cases, the economic team will find that the components of an economic ceasefire overlap with the military one, necessitating coordination among the economic, military and political leads within the envoy's office and the wider UN system. Reopening key roads and removing internal and international barriers to the movement of people, goods and money like checkpoints would be of fundamental importance to the reintegration of the economy and would help normalise prices nationwide. The UN-led military track already involves efforts to secure roads bisected by front lines, while the initiative the UN pursued in 2020-2021 included provisions on reopening Hodeida port and Sanaa airport.

Secondly, the envoy, in coordination with UN humanitarian agencies and international institutions, can seek ways to unlock new funding for import financing and currency stabilisation. With the controversy of the government's alleged mismanagement of the Saudi deposit, most outside powers do not trust the government to administer large amounts of hard currency. Nor, under present circumstances, would they allow the Huthis to oversee a new hard-currency import facility. For these reasons, a new mechanism overseen by international institutions like the UN and World Bank could be the best way forward. Money provided to the new import facility might be used to support imports and the riyal but would not be directly overseen by the government or the Huthis.

The envoy will also need international support. Crisis Group has repeatedly advocated for formation of an international contact group chaired by the envoy's office.[191] This group's primary objective should be to endorse a long-term vision for the conflict's resolution, coordinate different mediation tracks, jointly determine steps that will maximise chances of successful UN-led negotiations and establish a division of labour among its members to support the peace process, including the economic track. The contact group should at a minimum include the UN Security Council's five permanent members and representatives of the Gulf Cooperation Council states, with the European Union perhaps joining as well.

[191] See, for example, Crisis Group Reports, *Rethinking Peace in Yemen;* and *The Case for More Inclusive – and More Effective – Peacemaking in Yemen*, both op. cit.

VI. Conclusion

It has been seven years since the Huthis seized Sanaa in an assault they justified by citing the economic plight of ordinary Yemenis. Yet as the war has dragged on, what was the Arab world's poorest country has become one of the poorest places on the planet. More people have died during the war from hunger and preventable disease than in combat or aerial bombardment. A political solution to the war looks far off, and the humanitarian crisis is set to deepen.

Yemen's economic predicament is evidence that warfare comes in many forms, some of them harder to see or grasp than others, but no less deadly for it. To end the conflict, UN mediators and outside powers will have to grapple with each of the war's aspects at once, and work toward a mediation approach that places equal weight on its political, military and economic dimensions.

Amman/Cairo/Aden/Sanaa/New York/Brussels, 20 January 2022

Appendix A: Data and Method

The analyses in section III of this report draw on commodity price data and a newly constructed dataset of monthly changes in territorial control at the district level compiled by Crisis Group and validated against other similar datasets including one formulated by the Armed Conflict Location & Event Data Project (ACLED). The figures in the body of the report describe the correlation between prices and territorial control. To address the possibility that the observed relationships between territorial control and commodity prices are determined by other factors, Appendix A.II presents two statistical tests –two-way fixed effects and synthetic control regression analysis – that isolate the effect of territorial control on pricing and find a significant difference for diesel but not for wheat. Details on the calculation of fuel revenue and profit estimates are presented in section A.III.

I. Data

These analyses rely on several data sources:

1. a dataset tracking territorial control;
2. data on commodity prices from the 23 governorate capitals;
3. data on fuel and food imports.

The territorial control dataset tracks the "dominant actor" in a given territory over time, which we define as the political entity monopolising the use of violence over that territory.[192] Its unit of analysis is the district-month (n=27,805), meaning that it is collected at the administrative district level (n=335), on a monthly basis beginning with the outset of conflict in January 2015. It was collated by Crisis Group and validated against a similar database constructed by ACLED.[193]

The commodity price data cover several key commodities, including wheat flour, rice, sugar, diesel and gasoline. The level of analysis is the governorate-month; data are collected in each of the governorate capitals (n=23), beginning in June 2016.[194] The data are taken from the Global Food Prices Database of the UN World Food Programme (WFP).

Data on imports track the movement of goods into Yemen, disaggregated by type (food, fuel, other non-food) and point of entry (n=7). The unit of analysis is the port-month, and coverage begins in August 2017. The data were given to Crisis Group by a trusted third party, a private trade data-gathering firm.

II. The control actor-commodity price relationship

Figures 3 and 4 plot commodity prices, averaging the prices in markets controlled by a given political actor by month. These trends suggest a correlation between the dominant actor in a given market and commodity prices, but do not exclude the pos-

[192] Where several organisations share control or engage in open conflict, Crisis Group coded the "dominant actor" as the one estimated to be most able to command the local population and inflict damage on other political actors.
[193] Shared privately with Crisis Group.
[194] The governorate of Hajjah is excluded from analyses presented here because the city in which WFP collects data in the governorate shifts in early 2020.

sibility that other features of a given market could be influencing commodity prices – or determining both patterns of political control and commodity prices.

To address these unobserved factors, Crisis Group fit a statistical model regressing commodity price in a given district-month on territorial control and a panel of other covariates, including whether there has been recent fighting or contestation in the district (see Table A.1). This report employs an ordinary least squares (OLS) regression model with two-way fixed effects, for market and period, on repeated observations of the same unit (commodity prices in a given market) to account for unobserved time and unit confounders.[195] This model allows for measuring the impact of territorial control on diesel prices absent the effect of unobserved market-specific factors, such as proximity to ports or other static characteristics inhering in a market. The same goes for variables that change across all units over time – for example, seasonal changes in prices that may be unobserved in the data but affect all markets in a similar way. Combining this model with observed time-varying covariates, such as violence levels, generates a more rigorous estimate of the effect of territorial control on commodity prices.

The model suggests that, all else being equal, when a territory moves from non-Huthi to Huthi control, the price of diesel fuel increases by $0.41 per litre, from a base of $0.62 – a 67 per cent difference in pricing. When the same model is used for wheat, the cost increases by only $0.05 per kilogram and is not statistically different from zero.

[195] Joshua D. Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton, 2009).

Table A.1 – OLS Regression of U.S. dollar commodity price on territorial control, with two-way fixed effects

Commodity	Diesel	Wheat
	(1)	(2)
Shift to Houthi	0.414***	0.047
	(0.156)	(0.031)
Remote violence previous month	–0.005	0.001
	(0.004)	(0.001)
Remote violence previous year	–0.001*	–0.0001
	(0.0004)	(0.0001)
Battle previous month	0.003	0.002**
	(0.005)	(0.001)
Contested	0.114***	0.011*
	(0.035)	(0.006)
2016	–1.395***	–0.171***
	(0.054)	(0.009)
2017	–1.471***	–0.229***
	(0.055)	(0.009)
2018	–1.429***	–0.256***
	(0.054)	(0.009)
2019	–1.450***	–0.175***
	(0.055)	(0.009)
2020	–1.547***	–0.212***
	(0.055)	(0.009)
2021	–1.338***	–0.204***
	(0.067)	(0.011)
Observations	1,477	1,498
R2	0.441	0.414
Adjusted R2	0.427	0.400
F Statistic	103.248***	93.888***
	(df = 11; 1442)	(df = 11; 1463)

To make this general relationship more concrete, Crisis Group also conducted a synthetic control analysis, comparing the trajectory of prices in a market captured by the Huthis to a simulated counterpart that is similar in all respects except that the military actor controlling it did not change over the period of interest. The report compares the market in al-Hazm – which came under Huthi control in February 2020 – to a "synthetic" al-Hazm constructed from a weighted combination of other markets throughout the country that never fell to the Huthis.

Synthetic control models assign a weight to each potential unit of comparison (in this case, several other markets throughout Yemen) and produce a combined average of those units that most closely resemble the observed characteristics of the unit of interest, constituting the baseline or "synthetic" control version of the unit of interest. If observed and synthetic markets follow a similar trajectory in the pre-treatment period, it is reasonable to assume they would have had a matching trajectory in the post-treatment period, had the unit of interest (ie, al-Hazm) not experienced the "treatment" of interest (ie, capture by the Huthis). Thus the report is able to measure the causal effect of a change in territorial control from the divergence of prices in the treated market from that of the control market.[196]

Compared to the baseline in which the market remained under government control, diesel prices in the actual al-Hazm market were on average $0.51 higher than those in the synthetic control in the seven months following the Huthi takeover (prices in al-Hazm fell compared to the synthetic control, and government-controlled areas generally, beginning October 2020, as growing volumes of fuel entered the governorate overland from Marib to replace reduced fuel supply into Hodeida, creating a glut in local supply).

III. Calculation of fuel revenue and profit estimates

The Huthis impose customs and other fees on all fuel entering their areas. Through the Yemen Petroleum Corporation (YPC), the state-run oil and gas distributor, they also control all fuel sales in areas under their control, purchasing fuel at a set price and selling it via state-held petrol stations and the parallel "grey" market (for more detail, see the discussion in footnote 156). A simple formula allowed Crisis Group to estimate the share of revenues accruing to the de facto authorities in Sanaa attributable to customs, taxes and sales.

Crisis Group estimated potential profits from diesel and petrol sales by multiplying (1) the estimated total volume of fuel passing into Huthi-controlled areas by (2) the price of fuel at the point of sale, and subtracting (3) estimated costs not recouped by the governing authorities. Crisis Group also counts customs and other fees toward Huthi fuel income. In estimating volumes and total income, Crisis Group has used conservative assumptions on the volume of fuel entering Huthi-controlled territory – in many cases lower than those stated publicly by actors involved in the fuel trade. Due to the many factors influencing fuel pricing and transport in Yemen, and the challenges of collecting the pertinent information, the figures in the text are illustrative estimates and should not be read as definitive.

To calculate fuel import volumes (item 1 above) Crisis Group used data gathered by a private trade data-gathering firm on fuel imports to all major Yemeni sea and land ports, and gathered data on local production from contacts in-country. For the purpose of the revenue estimates used in the report, Crisis Group assumes that all fuel imported through Hodeida is sold in Huthi-controlled areas, and that a portion of fuel imported through other ports and produced in areas outside of Huthi control passed into areas of Huthi control.[197] Point-of-sale price estimates in each gover-

[196] See Alberto Abadie, Alexis Diamond and Jens Hainmueller, "Comparative Politics and the Synthetic Control Method", *American Journal of Political Science*, vol. 59, no. 2 (2015), pp. 495-510.
[197] The amount of fuel passing from Hadi government- to Huthi-controlled territory was capped at 40 per cent of the total national inflow. In other words, fuel imported to Aden and Mukalla was counted as passing into Huthi-controlled areas only when imports to Hodeida constituted less than 40 per cent of total imports. In such cases, Crisis Group calculations subtract imports to Hodeida and 60 per cent of the national total from the total of imports to Aden and Mukalla, and count the remainder as passing from Aden and Mukalla ports into Huthi-controlled areas. This assumption is conservative; the government itself has publicly stated that 60 per cent of fuel coming into ports under its control passes to Huthi-run areas (see the discussion at footnote 138). For Marib, Crisis Group assumed (conservatively) that 10 per cent of diesel and petrol produced in Marib passes into Huthi-controlled areas, based upon discussion with oil and gas executives and other traders.

norate capital (item 2 above) are drawn from WFP data, to calculate total fuel revenues.[198] Costs not recouped by governing authorities (item 3 above) include the world price, demurrage, in-country transport and compensation to importers; they differ by site of import, as explained in the footnote.[199]

[198] See Appendix A.I for detail on WFP data. Average point-of-sale prices by control actor were calculated using a weighted average of governorate prices, based upon the last six years of available fuel sales volume data, from the YPC (2008-2013). Data on file with Crisis Group. The WFP prices employed for point-of-sale revenue estimates are a conservative means of estimating Huthi revenue in that they use only officially posted point of sale prices rather than parallel market prices.

[199] For Hodeida, Aden, and Mukalla, costs subtracted from the total revenue gained at point-of-sale are the following: (i) world fuel prices, Gasoil 0.5 per cent Mideast Gulf Singapore close for diesel and Gasoline 95r Mideast Gulf Singapore close for petrol, taken from Argus, an energy and commodity price-tracking firm; (ii) transport costs, assumed to be 6 per cent of the cost at point of sale for Hodeida and Marib, and 9 per cent for Aden and Mukalla to account for the additional distance fuel trucked from these ports into Huthi-controlled areas; Crisis Group telephone interviews, fuel transport industry experts specialised in Yemen, March, May and September 2021; (iii) compensation to fuel importers, $80 per metric tonne (converted at 1,351 liters per metric tonne for petrol and 1,192 MT/L for diesel, per Don Hofstrand, "Energy Measurements and Conversions", Iowa State University Extension and Outreach Ag Decision Maker, undated). Some $50 of this amount is recaptured as customs and taxes by YPC in Huthi-controlled Hodeida (and is paid to local authorities in Aden and Mukalla). Crisis Group telephone interviews, businessmen involved in the fuel trade, July and October 2021, and ACAPS; (iv) taxes and customs duties paid to government of Yemen and local authorities (Aden and Mukalla only), 21.4 per cent of world price for petrol (11.4 per cent taxes, 10 per cent customs), 16.4 per cent for diesel (11.4 per cent taxes, 5 per cent customs), converted to Yemeni riyals at the rate of 250 riyals per dollar, per ACAPS; (v) demurrage costs, computed via a per-metric-tonne cost of demurrage based upon total import tonnage and demurrage costs for all Yemeni ports in 2020, obtained from a private data-gathering firm and on file with Crisis Group; (vi) other in-country processing and logistical costs borne by the distributor in Huthi-controlled areas, the YPC, estimated to be $0.12 per liter, per the 2018 Panel of Experts report to the UN Security Council (Annex 47) and interviews with individuals involved in the fuel trade. See "Effects of the fuel embargo at Al Hodeidah port on fuel supply dynamics and fuel prices", ACAPS, 17 August 2021. For Marib: Input cost of fuel brought to Huthi-controlled areas is priced based upon the WFP point-of-sale price in Marib, rather than world prices. Unlike for the other three ports, only the retail price and YPC costs ($0.12 per liter) are deducted from the point-of-sale price in Huthi-controlled areas in calculating revenue because this fuel does not go through the same international import process as fuel coming through the other three ports. Crisis Group telephone interviews, Safer official in Marib, June 2021; oil and gas industry officials, 2020-2021.

Appendix B: About the International Crisis Group

The International Crisis Group (Crisis Group) is an independent, non-profit, non-governmental organisation, with some 120 staff members on five continents, working through field-based analysis and high-level advocacy to prevent and resolve deadly conflict.

Crisis Group's approach is grounded in field research. Teams of political analysts are located within or close by countries or regions at risk of outbreak, escalation or recurrence of violent conflict. Based on information and assessments from the field, it produces analytical reports containing practical recommendations targeted at key international, regional and national decision-takers. Crisis Group also publishes *CrisisWatch*, a monthly early-warning bulletin, providing a succinct regular update on the state of play in up to 80 situations of conflict or potential conflict around the world.

Crisis Group's reports are distributed widely by email and made available simultaneously on its website, www.crisisgroup.org. Crisis Group works closely with governments and those who influence them, including the media, to highlight its crisis analyses and to generate support for its policy prescriptions.

The Crisis Group Board of Trustees – which includes prominent figures from the fields of politics, diplomacy, business and the media – is directly involved in helping to bring the reports and recommendations to the attention of senior policymakers around the world. Crisis Group is co-chaired by President & CEO of the Fiore Group and Founder of the Radcliffe Foundation, Frank Giustra, as well as by former Foreign Minister of Argentina and Chef de Cabinet to the United Nations Secretary-General, Susana Malcorra.

Comfort Ero was appointed Crisis Group's President & CEO in December 2021. Ero first joined Crisis Group as West Africa Project Director in 2001 and later rose to become Africa Program Director and Interim Vice President. In between her two tenures at Crisis Group, she worked for the International Centre for Transitional Justice and the Special Representative of the Secretary-General, UN Mission in Liberia.

Crisis Group's international headquarters is in Brussels, and the organisation has offices in seven other locations: Bogotá, Dakar, Istanbul, Nairobi, London, New York, and Washington, DC. It has presences in the following locations: Abuja, Addis Ababa, Bahrain, Baku, Bangkok, Beirut, Caracas, Gaza City, Guatemala City, Jerusalem, Johannesburg, Juba, Kabul, Kiev, Manila, Mexico City, Moscow, Seoul, Tbilisi, Toronto, Tripoli, Tunis, and Yangon.

Crisis Group receives financial support from a wide range of governments, foundations, and private sources. The ideas, opinions and comments expressed by Crisis Group are entirely its own and do not represent or reflect the views of any donor. Currently Crisis Group holds relationships with the following governmental departments and agencies: Australian Department of Foreign Affairs and Trade, Austrian Development Agency, Canadian Department of National Defence, Danish Ministry of Foreign Affairs, Dutch Ministry of Foreign Affairs, European Union Emergency Trust Fund for Africa, European Union Instrument contributing to Stability and Peace, Finnish Ministry of Foreign Affairs, French Development Agency, French Ministry of Europe and Foreign Affairs, Global Affairs Canada,, Irish Department of Foreign Affairs, Japan International Cooperation Agency, Ministry of Foreign Affairs of the Principality of Liechtenstein, Luxembourg Ministry of Foreign and European Affairs, Norwegian Ministry of Foreign Affairs, Qatar Ministry of Foreign Affairs, Swedish Ministry of Foreign Affairs, Swiss Federal Department of Foreign Affairs, United Arab Emirates (Ministry of Foreign Affairs and International Cooperation and Anwar Gargash Diplomatic Academy), United Nations Development Programme, United Nations World Food Programme, UK Foreign, Commonwealth and Development Office, and the World Bank.

Crisis Group also holds relationships with the following foundations and organizations: Carnegie Corporation of New York, Ford Foundation, Global Challenges Foundation, Henry Luce Foundation, John D. and Catherine T. MacArthur Foundation, Open Society Foundations, Ploughshares Fund, Robert Bosch Stiftung, Rockefeller Brothers Fund, Stiftung Mercator, and Wellspring Philanthropic Fund.

January 2022

Appendix C: Reports and Briefings on the Middle East and North Africa since 2019

Special Reports and Briefings

Council of Despair? The Fragmentation of UN Diplomacy, Special Briefing N°1, 30 April 2019.

Seven Opportunities for the UN in 2019-2020, Special Briefing N°2, 12 September 2019.

Seven Priorities for the New EU High Representative, Special Briefing N°3, 12 December 2019.

COVID-19 and Conflict: Seven Trends to Watch, Special Briefing N°4, 24 March 2020 (also available in French and Spanish).

A Course Correction for the Women, Peace and Security Agenda, Special Briefing N°5, 9 December 2020.

Ten Challenges for the UN in 2021-2022, Special Briefing N°6, 13 September 2021.

Israel/Palestine

Defusing the Crisis at Jerusalem's Gate of Mercy, Middle East Briefing N°67, 3 April 2019 (also available in Arabic).

Reversing Israel's Deepening Annexation of Occupied East Jerusalem, Middle East Report N°202, 12 June 2019.

The Gaza Strip and COVID-19: Preparing for the Worst, Middle East Briefing N°75, 1 April 2020 (also available in Arabic).

Gaza's New Coronavirus Fears, Middle East Briefing N°78, 9 September 2020 (also available in Arabic).

Beyond Business as Usual in Israel-Palestine, Middle East Report N°225, 10 August 2021 (also available in Arabic).

Iraq/Syria/Lebanon

Lessons from the Syrian State's Return to the South, Middle East Report N°196, 25 February 2019.

The Best of Bad Options for Syria's Idlib, Middle East Report N°197, 14 March 2019 (also available in Arabic).

After Iraqi Kurdistan's Thwarted Independence Bid, Middle East Report N°199, 27 March 2019 (also available in Arabic and Kurdish).

Squaring the Circles in Syria's North East, Middle East Report N°204, 31 July 2019 (also available in Arabic).

Iraq: Evading the Gathering Storm, Middle East Briefing N°70, 29 August 2019 (also available in Arabic).

Averting an ISIS Resurgence in Iraq and Syria, Middle East Report N°207, 11 October 2019 (also available in Arabic).

Women and Children First: Repatriating the Westerners Affiliated with ISIS, Middle East Report N°208, 18 November 2019.

Ways out of Europe's Syria Reconstruction Conundrum, Middle East Report N°209, 25 November 2019 (also available in Arabic and Russian).

Steadying the New Status Quo in Syria's North East, Middle East Briefing N°72, 27 November 2019 (also available in Arabic).

Easing Syrian Refugees' Plight in Lebanon, Middle East Report N°211, 13 February 2020 (also available in Arabic).

Silencing the Guns in Syria's Idlib, Middle East Report N°213, 15 May 2020 (also available in Arabic).

Pulling Lebanon out of the Pit, Middle East Report N°214, 8 June 2020 (also available in Arabic).

Iraq: Fixing Security in Kirkuk, Middle East Report N°215, 15 June 2020 (also available in Arabic).

*Exiles in Their Own Country: Dealing with Displacement in Post-ISIS Iraq***,** Middle East Briefing N°79, 19 October 2020 (also available in Arabic).

How Europe Can Help Lebanon Overcome Its Economic Implosion, Middle East Report N°219, 30 October 2020 (also available in Arabic).

Avoiding Further Polarisation in Lebanon, Middle East Briefing N°81, 10 November 2020 (also available in Arabic).

Iraq's Tishreen Uprising: From Barricades to Ballot Box, Middle East Report N°223, 26 July 2021 (also available in Arabic).

Managing Lebanon's Compounding Crises, Middle East Report N°228, 28 October 2021 (also available in Arabic).

Syria: Shoring Up Raqqa's Shaky Recovery, Middle East Report N°229, 18 November 2021 (also available in Arabic).

North Africa

Decentralisation in Tunisia: Consolidating Democracy without Weakening the State, Middle East and North Africa Report N°198, 26 March 2019 (only available in French).

Addressing the Rise of Libya's Madkhali-Salafis, Middle East and North Africa Report N°200, 25 April 2019 (also available in Arabic).

Post-Bouteflika Algeria: Growing Protests, Signs of Repression, Middle East and North Africa Briefing N°68, 26 April 2019 (also available in French and Arabic).

Of Tanks and Banks: Stopping a Dangerous Escalation in Libya, Middle East and North Africa Report N°201, 20 May 2019.

Stopping the War for Tripoli, Middle East and North Africa Briefing N°69, 23 May 2019 (also available in Arabic).

Avoiding a Populist Surge in Tunisia, Middle East and North Africa Briefing N°73, 4 March 2020 (also available in French).

Algeria: Bringing Hirak in from the Cold? Middle East and North Africa Report N°217, 27 July 2020 (also available in Arabic and French).

Fleshing Out the Libya Ceasefire Agreement, Middle East and North Africa Briefing N°80, 4 November 2020 (also available in Arabic).

Time for International Re-engagement in Western Sahara, Middle East and North Africa Briefing N°82, 11 March 2021.

Libya Turns the Page, Middle East and North Africa Report N°222, 21 May 2021 (also available in Arabic).

Jihadisme en Tunisie : éviter la recrudescence des violences, Middle East and North Africa Briefing N°83, 4 juin 2021 (only available in French).

Relaunching Negotiations over Western Sahara, Middle East and North Africa Report N°227, 14 October 2021 (also available in Arabic).

Iran/Yemen/Gulf

On Thin Ice: The Iran Nuclear Deal at Three, Middle East Report N°195, 16 January 2019 (also available in Farsi and Arabic).

Saving the Stockholm Agreement and Averting a Regional Conflagration in Yemen, Middle East Report N°203, 18 July 2019 (also available in Arabic).

Averting the Middle East's 1914 Moment, Middle East Report N°205, 1 August 2019 (also available in Farsi and Arabic).

After Aden: Navigating Yemen's New Political Landscape, Middle East Briefing N°71, 30 August 2019 (also available in Arabic).

Intra-Gulf Competition in Africa's Horn: Lessening the Impact, Middle East Report N°206, 19 September 2019 (also available in Arabic).

The Iran Nuclear Deal at Four: A Requiem?, Middle East Report N°210, 16 January 2020 (also available in Arabic and Farsi).

Preventing a Deadly Showdown in Northern Yemen, Middle East Briefing N°74, 17 March 2020 (also available in Arabic).

Flattening the Curve of U.S.-Iran Tensions, Middle East Briefing N°76, 2 April 2020 (also available in Arabic).

The Urgent Need for a U.S.-Iran Hotline, Middle East Briefing N°77, 23 April 2020 (also available in Farsi).

The Middle East between Collective Security and Collective Breakdown, Middle East Report N°212, 27 April 2020 (also available in Arabic).

Rethinking Peace in Yemen, Middle East Report N°216, 2 July 2020 (also available in Arabic).

Iran: The U.S. Brings Maximum Pressure to the UN, Middle East Report N°218, 18 August 2020 (also available in Arabic).

The Iran Nuclear Deal at Five: A Revival?, Middle East Report N°220, 15 January 2021 (also available in Arabic and Farsi).

The Case for More Inclusive – and More Effective – Peacemaking in Yemen, Middle East Report N°221, 18 March 2021 (also available in Arabic).

Iran: The Riddle of Raisi, Middle East Report N°224, 5 August 2021 (also available in Arabic).

A Time for Talks: Toward Dialogue between the Gulf Arab States and Iran, Middle East Report N°226, 24 August 2021 (also available in Arabic).

After al-Bayda, the Beginning of the Endgame for Northern Yemen?, Middle East Briefing N°84, 14 October 2021 (also available in Arabic).

*The Iran Nuclear Deal at Six: Now or Never***,** Middle East Report N°230, 17 January 2022.

Appendix D: International Crisis Group Board of Trustees