

TOP of MIND

MIDDLE EAST RISKS



Hamas' October 7 attacks on Israel and its response have thrust the Middle East back into focus and raised concerns that the ongoing conflict could erupt into a wider regional or even broader war. How the current conflict could unfold—and the market and macro implications—is Top of Mind. We turn to former US Ambassador to Israel and Syria Edward Djerejian, IISS' Emile Hokayem, GS' Jared Cohen, Start-Up Nation Central's Avi Hasson, and GS GIR economists and strategists. Djerejian and Hokayem largely agree that no side is currently motivated to escalate the war, but both worry that a miscalculation could lead to a wider conflict. Our strategists and economists then assess the impact of a potential escalation on energy prices—finding large upside risks for oil and especially natural gas—and regional risk assets and economies, which they caution investors to not be complacent about. Finally, we dig into how to position portfolios against geopolitical shocks, with our strategists seeing value in diversification and allocations to select safe havens, commodities, and option hedges.



Once one enters the fog of war, anything can happen, including major miscalculations that lead to a wider war.

- Edward P. Djerejian

The potential for a miscalculation that turns the conflict into an all-out war remains significant; rational actors can make a strategic decision not to escalate and still become entangled in an escalatory spiral.

- Emile Hokayem

While people are worried about the prospect of regional contagion, I'm more concerned about the broader contagion and consequences.

- Jared A. Cohen



Allison Nathan | allison.nathan@gs.com

Jenny Grimberg | jenny.grimberg@gs.com

Ashley Rhodes | ashley.rhodes@gs.com

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GS Markets Research

...AND MORE

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Macro news and views

We provide a brief snapshot on the most important economies for the global markets

US

Latest GS proprietary datapoints/major changes in views

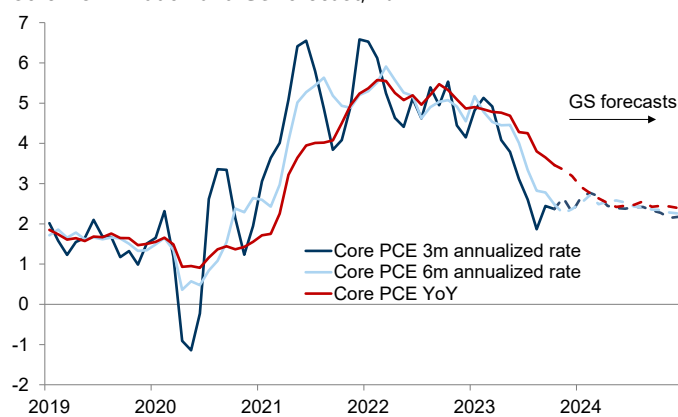
- We now forecast a long-run policy rate of 3.5-3.75% as resilient growth has raised our conviction that the economy can survive higher rates and elevated government deficits, and widespread gen AI adoption also argues for higher rates.

Datapoints/trends we're focused on

- US inflation; we think the hard part of the inflation fight is now over and expect continued rebalancing in the auto, housing rental, and labor markets to lead core PCE inflation to fall to 2.4% by December 2024.
- US growth; we expect still-strong US growth of 1.8% in 2024 (on a Q4/Q4 basis) and see only a historically average 15% probability of US recession over the next 12m.

US inflation approaching its final descent

Core PCE inflation and GS forecast, %



Source: Department of Commerce, Goldman Sachs GIR.

Japan

Latest GS proprietary datapoints/major changes in views

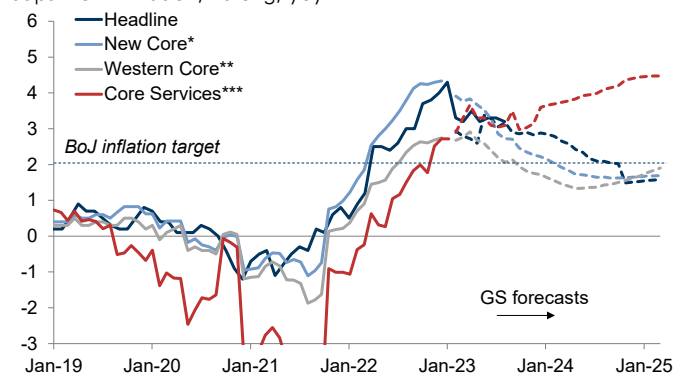
- We now forecast an end-2024 BoJ rate of 0% as we now think that the BoJ will exit negative interest rate policy in Oct 2024 (vs. Apr 2025), as well as yield curve control, once it has confirmed the establishment of a virtuous cycle between wages and prices.

Datapoints/trends we're focused on

- Japanese inflation; we expect basic wage growth of 2.7% in FY2024 to lead to higher prices in the services industry, which has been reluctant to pass on rising labor costs so far.
- Japanese growth, which we expect to slow but remain above potential at 1.5% in CY2024 (from 1.9% in CY2023).

All eyes on inflation in Japan

Japan CPI inflation, % chg, yoy



*CPI ex. fresh food and energy. **CPI ex. food and energy. ***Services CPI ex. rent and dining. Source: Haver Analytics, Goldman Sachs GIR.

Europe

Latest GS proprietary datapoints/major changes in views

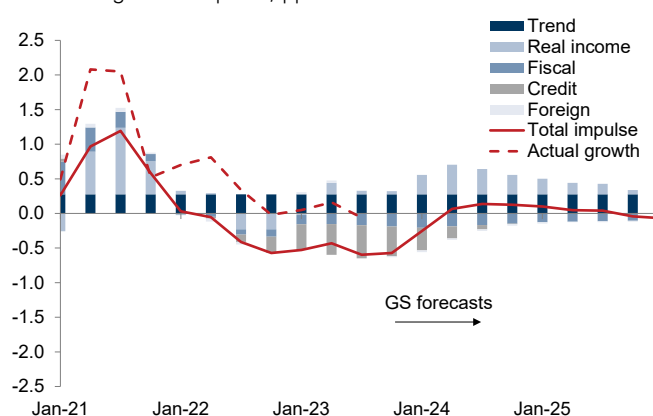
- We recently lowered our end-2024 ECB rate forecast to 3.25% as we now expect the first rate cut in 2Q24 (vs. 3Q24) given rapid inflation cooling, a likely larger fiscal drag in Germany next year, and signs of labor market softening.
- We recently raised our 2024 UK GDP growth forecast to 0.7% (from 0.6%) to reflect a marginally smaller fiscal drag.
- As in the US, we now forecast a higher long-run policy rate of 2.5% in the Euro area and 3% in the UK as economic fundamentals argue for higher long-term rates.

Datapoints/trends we're focused on

- Euro area growth, which we expect to rise to 0.8% in 2024.

A growth pickup for the Euro area next year

Euro area growth impulse, pp



Source: Goldman Sachs GIR.

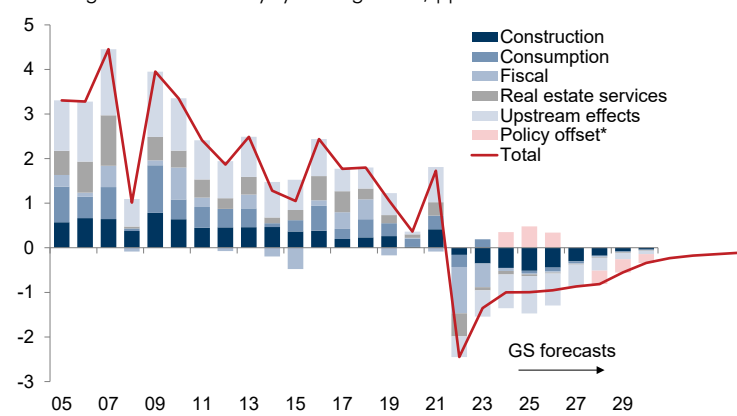
Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

- We now forecast higher CEEMEA neutral nominal policy rates to reflect our higher DM neutral rate forecasts.
- ### Datapoints/trends we're focused on
- China's multi-year growth slowdown, which will likely continue amid persistent headwinds, including a property downturn.
 - EM growth, which we expect to hold up well at 4% in 2024 despite a slowdown in BRIC economies, with faster growth in much of CEEMEA and a few export-oriented Asian EMs.
 - EM ex-China inflation, which is well off its peak and should decline by a further 2pp (full-year average basis) in 2024, while China inflation should increase but remain benign.
 - India's economic resilience, which should continue in 2024.

China's property sector still dragging

Housing contribution to yoy GDP growth, pp



*Policy offset includes public housing and urban village renovation programs. Source: Haver Analytics, Goldman Sachs GIR.

Middle East risks

Hamas' October 7 attacks on Israel and its response have thrust the Middle East back into focus and raised concerns that the ongoing conflict could erupt into a wider regional or even broader war, particularly as fighting has now resumed after a week-long pause. How the current conflict could unfold—and the market and macro implications—is Top of Mind.

We first ask Middle East experts Edward Djerejian, former US Ambassador to Israel and Syria and former US Assistant Secretary of State for Near Eastern Affairs, and Emile Hokayem, Director of Regional Security and Senior Fellow for Middle East Security at the International Institute for Strategic Studies, how the conflict could evolve and potentially escalate.

Djerejian, for his part, warns that “anything can happen” in the fog of war, including major miscalculations that lead to escalation. That said, he argues that no side currently considers it in their interests to escalate—not Israel, which has no desire to fight a multi-front war, the Arab states that don't want to disrupt their economies, or even Iran, who for now seems to want to save its firepower in the region for if and when it's directly threatened. But Djerejian argues that the longer Israel's war in Gaza rages on and the worse the humanitarian crisis there becomes, the more political pressure various actors may face to widen the conflict, including the highly-skilled and well-equipped Iranian proxy—Hizbullah—which, if it opens a second front with Israel, would likely draw the US in further. Ultimately, Djerejian believes that the only solution to the Israeli-Palestinian conflict is a political solution involving land-for-peace, though he says the strong leadership required to achieve this is currently lacking on all sides.

Hokayem generally agrees that no side is currently motivated to escalate the war. In particular, he too argues that Iran is saving the Hizbullah card for “the big one”—a direct threat to Iranian leaders or assets—though he believes that could change if not stepping in to help its allies threatens Iran's credibility or an emboldened Israel sets its sights on broader targets. And, like Djerejian, he worries about the potential for a miscalculation, warning that “rational actors can make a strategic decision not to escalate and still become entangled in an escalatory spiral”. Hokayem also cautions that a stable outcome for the region looks elusive, not only due to the current situation, but also because Middle East conflicts are inherently complex, which portends more instability in the months and years ahead that affects not only the region, but also the world more broadly.

We then dig into the potential implications of an escalation for growth and markets. With the biggest impacts likely to come through a disruption in energy supplies, GS Head of Oil Research Daan Struyven estimates the impact of potential escalation on energy prices, finding that in a “supply downside” scenario, oil prices could rise 5% above our 1Q24 baseline forecasts, and natural gas prices as much as 125%. And in a “severe supply downside” scenario that interrupts maritime traffic in the Strait of Hormuz—through which nearly 20% of global oil and LNG supplies flow—oil prices could spike by 20% or more and natural gas prices by as much as 370%.

GS FX strategists Karen Reichgott Fishman and Lexi Kanter assess what such a spike in energy prices could mean for FX, finding that NOK, MYR, and AUD could see the biggest gains,

while other Asian and European currencies, such as those of net energy importers like SGD, KRW, CZK, and EUR, could see the greatest losses. And GS economists find that a \$10/bbl rise in oil prices would have moderate inflationary impacts, with generally larger impacts in EMs, and modest negative growth impacts, though some net oil exporters would benefit.

Beyond the energy impacts, GS MENA economist Farouk Soussa cautions investors not to be complacent when it comes to the potential impacts the conflict may have on regional risk assets and economies. He argues that even a very low probability of a wider conflict deserves some risk premium, which markets aren't currently pricing. And even in the absence of a regional escalation, Soussa warns that the war will meaningfully impact regional economies, which is nowhere more the case than in Egypt. That said, he believes oil-exporting Gulf countries are unlikely to be materially impacted unless the conflict escalates, and may even benefit from the resulting rise in oil prices (see pg. 21 for more asset impacts).

When it comes to the broader fate of some of these Gulf oil exporters, Jared Cohen, GS President of Global Affairs and co-head of the Global Institute and Office of Applied Innovation, argues that the UAE, Qatar, and Saudi Arabia—the region's economic powerhouses—will remain the center of power and influence in the Middle East for a long time to come, as well as formidable geopolitical powers in today's increasingly complex world given their position as “geopolitical swing states”.

GS EM strategist Tadas Gedminas then assesses the implications for Israel specifically, arguing that while the conflict will weigh on Israeli growth, structural shifts over the past 20 years—in particular, the rise of the tech sector—have reduced the Israeli economy's vulnerability to economic and financial shocks, leaving it more resilient to any challenges.

And given the importance of the tech sector to the Israeli economy, global supply chains, and a large global investor base exposed to it, we turn to Avi Hasson, CEO of Start-Up Nation Central, to understand how the war is affecting it. He says that while the large number of tech workers reporting for military service and a difficult funding environment no doubt present challenges, the sector has shown “remarkable resilience”, with companies wasting no time shifting resources to ensure business continuity. While Hasson recognizes that a prolonged conflict would complicate this process, he notes that Israel's tech sector has endured—and even prospered—through previous conflicts and expects the same this time around.

Finally, we dig into how investors should position to defend against geopolitical shocks. GS multi-asset strategist Christian Mueller-Glissmann believes the first step is a well-diversified portfolio, with allocations to select safe havens, assets that could benefit from an escalating shock, and option hedges that can pay off in multiple scenarios. Currently, that means long positions in USD and CHF, allocations to commodities, or just adding some equity puts after the large decline in vol last month.

Allison Nathan, Editor

Email: allison.nathan@gs.com
Tel: 212-357-7504
Goldman Sachs & Co. LLC



Interview with Edward P. Djerejian

Edward P. Djerejian is former US Ambassador to Israel and Syria and former US Assistant Secretary of State for Near Eastern Affairs. Below, he argues that only a political solution can end the Middle East conflict, but that the strong leadership required for it is lacking.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.



Allison Nathan: How significant is the Israel-Hamas war for the region?

Edward Djerejian: I would place Hamas' attacks on Israel and the Israeli response in the category of major Israeli-Palestinian conflicts that have significant consequences for the political and geopolitical landscape of the Middle East. These include the

1948 Arab-Israeli War that resulted in the displacement of at least 750k Palestinians, which the Arabs referred to as the "Nakba", meaning "catastrophe" in Arabic, the 1967 Six-Day War in which Israel succeeded in occupying the Golan Heights, East Jerusalem, Sinai Peninsula, West Bank, and Gaza, and the 1973 Yom Kippur War. The October 7 attacks on Israel were so shockingly effective in terms of achieving Hamas' objectives of killing and taking hostages that they have had a major impact on the Israeli body politic and the regional landscape as a whole, which will undoubtedly be felt for a long time to come.

Allison Nathan: What roles have recent developments in the region played in setting the stage for these attacks?

Edward Djerejian: Several regional developments likely served as a prelude for the attacks. Hamas observed that the Palestinian issue was being relegated to a tertiary status in regional politics, and that Israel under the right-wing government of Prime Minister Benjamin Netanyahu continued to expand settlements in the occupied Palestinian territories in the West Bank. The Israeli government was also pushing the envelope on Jewish prayer rights at the Holy Mount in Jerusalem, the location of the holy places of Jews, Christians, and Muslims and the third most important religious site in Islam, the Al-Aqsa Mosque. This caused anxiety among Muslims and undoubtedly factored into Hamas' calculations. Indeed, Hamas referred to their actions as the "Al-Aqsa Flood" to draw attention to their view that Israeli policy was bent on constraining the rights of Muslims in the holy city and sites.

Hamas also likely saw that Israel was preoccupied with proposed legal reforms that aimed to elevate the power of the Knesset at the expense of the Supreme Court, which caused a major furor within the country and resulted in a divided and weakened Israeli body politic. The redeployment of IDF troops from the southern border with Gaza to the West Bank to deal with Israeli settler and Palestinian unrest was another consideration. And Hamas was likely focused on the Biden Administration's major diplomatic initiative in the Middle East of promoting the expansion of the Abraham Accords to include Saudi Arabia. In Hamas' eyes, this was an attempt to further marginalize the core issue of the Palestinians, which is land-for-peace, by instead offering economic benefits in exchange for normalized relations, making peace transactional. Together, these factors likely explain why Hamas decided to act now.

Allison Nathan: What are Hamas' and Israel's goals in the current conflict, and are they achievable?

Edward Djerejian: Hamas' primary goal is to end the marginalization of the Palestinian issue, which they've achieved—the whole world is now focused on the Israeli-Palestinian conflict. A secondary goal as an Islamist party with a military wing is to position themselves as the primary defender of the Palestinian cause, which, again, they've achieved. According to Hamas' original charter, its goal is the eradication of the Israeli state. And here they differ from the larger Palestinian movement that includes Fatah and the Palestine Liberation Organization (PLO), who recognized the state of Israel in 1988. In 2017, Hamas introduced a new charter that supported a transitional Palestinian state within the 1967 borders, but without recognizing Israel. So, Hamas' October 7 attacks served to bring their political agenda to the forefront.

Israel's stated goal under Netanyahu is the destruction of Hamas to ensure that Gaza never again becomes a launchpad from which to attack Israel. But whether Hamas can be destroyed through military means is an open question; it depends on whether one views Hamas solely as a terrorist group or also as a political movement. As we've seen with the Taliban, al-Qaeda, Hizbullah, and other groups, political movements are incredibly difficult to destroy. But that is Netanyahu's stated aim. Israel may at least be able to expand the buffer zone within Gaza against Israel's southern border and demilitarize the Gaza Strip, but opposition exists to Israel dividing Gaza, reoccupying it, or expelling its population. And, of course, Israel's other key goal is the release of the roughly 240 hostages, where we have seen some progress via humanitarian pauses coupled with hostage releases.

Allison Nathan: Is there any chance that the temporary pauses we've seen become permanent?

Edward Djerejian: Israel is adamantly opposed to a ceasefire, which they think would provide Hamas the opportunity to regroup and remobilize. The pause has now ended, and military operations have recommenced. But some strong voices in the international community advocate for a permanent ceasefire given how much blood has been spilled on both sides. So, if and when a permanent ceasefire happens remains to be seen. Humanitarian pauses and hostage releases are likely to grow more complicated as Hamas will want to hold onto the leverage that the hostages provide and will likely be less willing or ask for a higher price to release hostages that are Israeli military personnel as opposed to civilians.

Allison Nathan: How likely is further regional escalation?

Edward Djerejian: Once one enters the fog of war, anything can happen, including major miscalculations that lead to a wider war. But Israel currently doesn't seem to consider it in their interest to escalate, especially on its northern front with

Hizbullah—it has no desire to face a two-front war. None of the Arab states want an escalation, either, as the ensuing instability would impact their domestic political situations and economies. And even Iran doesn't seem to want an escalation that they could influence by having their skilled and well-equipped proxy—Hizbullah—attack Israel. Iran sees this as Hamas' war, at least in part because, as I've learned from Iranian policy experts, they'd rather keep the Hizbullah card in their back pocket in the event that Iran is attacked directly by Israel, with or without US support.

But if the war in Gaza continues and the humanitarian crisis worsens, the key question is whether Iran and its proxies and/or other Arab states would be politically pressured into widening the conflict. That question is of the utmost importance for the geopolitical stability of the Middle East and of the world more broadly. A regional conflict would compromise the flow of oil, especially if Iran is involved, and the resulting spike in oil prices would have a destructive impact on many economies as well as on American domestic politics as the US heads into a presidential election.

Allison Nathan: But will Israel feel the need to broaden the conflict to regain its sense of security in the region?

Edward Djerejian: Israel likely wants to keep its options open to attack hostile actors at a time and choosing of its own. And right now, as I mentioned, Israel is so preoccupied with the major effort in Gaza that it would prefer not to open a second front itself. But it will open a second front with the north if Hizbullah initiates serious attacks on Israeli targets. Tactical strikes across the Lebanese-Israeli border have been relatively measured so far. So, the decision at the moment rests more with Hizbullah—unless it ups the ante, Israel will probably choose to remain focused on Gaza and Hamas.

Allison Nathan: Are you worried that recent attacks on US forces could draw the US into a wider Middle East conflict?

Edward Djerejian: While it will depend on the extent of such attacks going forward, the main way the US could end up more entangled is if a second front opens with Hizbullah in Israel's north and Iran becomes involved. The Biden Administration has sent two carrier task forces to the region to deter Hizbullah and Iran and act as a safety measure in case the war does escalate and American citizens need to be evacuated. History suggests that US involvement in a larger Middle East war may have disastrous consequences. The 2003 Iraq War was one of the worst miscalculations in US foreign policy in the Middle East, leading to more regional instability and the rise of ISIS. The American body politic has no appetite for another major Middle East conflict after that debacle and the long war in Afghanistan. I think the Biden Administration knows it must do everything possible to avert such a scenario.

Allison Nathan: So, what will it take for the conflict to end?

Edward Djerejian: Under no circumstances should we return to the pre-October 7 status quo—Netanyahu's policies vis-à-vis Hamas have failed, and the unresolved Palestinian issue remains a major cause of instability. Frameworks for peace exist that can be revitalized to show a pathway forward. The 1979 Egypt-Israel peace treaty, the 1991 Madrid Peace Conference framework, and the 1994 Israel-Jordan peace

treaty are positive examples. What is required is a consensus among the parties on what the principles of an Israeli-Palestinian agreement should be. UN Security Council resolutions 242/338, which have served as the international basis for Arab-Israeli and Israeli-Palestinian peace negotiations over the last several decades, provide the framework for such negotiations based on the land-for-peace formula. We must dispense with the illusion that the Palestinian issue can be solved through economic or investment initiatives and return to the negotiating table on the basis of land-for-peace and the two-state solution, which is the only approach that would allow for a democratic Jewish state to peacefully and securely coexist alongside an independent Palestinian sovereign state.

Allison Nathan: But haven't several attempts at such a land-for-peace solution failed in the past?

Edward Djerejian: Many such opportunities have indeed failed in recent decades, like the 2000 Camp David negotiations when Yasser Arafat walked away because he claimed he couldn't make a decision on final status issues such as Jerusalem without a consensus from other Arab countries, especially Saudi Arabia, given the religious implications of any deal. Israeli Prime Minister Ehud Olmert's 2008 peace proposal also failed.

But both the Palestinians and the Israelis have made compromises on a principled approach for land-for-peace over the last several decades that may be built on in future circumstances. Whereas the Yom Kippur War in 1973 led to the Camp David Accords and the Egypt-Israel peace treaty in 1979, the October 7 attacks are of equal consequence to be a catalyst for renewed peace negotiations. To do so would require elections in both Israel and Palestine to bring new and strong leaders to the fore who have the credibility and political will to make peace. Israeli Prime Minister Yitzhak Rabin was such a leader, and when I was US ambassador to Israel, he told me that there is no military solution to the Israeli-Palestinian conflict, only a political one.

When I first arrived in Damascus in 1988 as the US ambassador to Syria, President Hafiz al-Assad wouldn't even utter the word "Israel", instead calling it "the Zionist entity". But under the strong direction of US President George H.W. Bush and Secretary of State James Baker, we engaged him in intense diplomacy, and by 1991 Assad spoke about Israel as a state and engaged in direct negotiations with it under the aegis of the Madrid Peace Conference. On the Israeli side, right-wing Likud Prime Minister Yitzhak Shamir was not interested in engaging in territorial compromises involving the West Bank, but we offered him a deal he couldn't refuse—direct negotiations with all of Israel's immediate Arab neighbors—and we eventually convinced him to do so. Frankly, I don't see the required leadership now—not among the Palestinians given that the Palestinian Authority and PLO are weak, and not in Israel where Netanyahu's failed policies have left him in a vulnerable position and beholden to the interests of his right-wing coalition partners. Equally important is leadership and the demonstration of political will going beyond rhetoric in the international community. Here the US can still play an important role, but it needs to craft a coherent Middle East strategy going forward and adopt a principled position of land-for-peace to resolve the Israeli-Palestinian conflict.

Interview with Emile Hokayem

Emile Hokayem is Director of Regional Security and Senior Fellow for Middle East Security at the International Institute for Strategic Studies. Below, he discusses the conflict in the Middle East, how it could evolve, and what the region could look like in its aftermath.

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Allison Nathan: How had regional dynamics in the Middle East shifted in the run-up to Hamas' October 7 attacks on Israel?

Emile Hokayem: The past decades have seen the emergence of Iran as a powerful regional disruptor, the relative weakening of the core Arab states—Egypt, Syria, Iraq—and the rise of the Gulf states as geoeconomic, financial, and political powerhouses. Israel has also emerged as a prosperous economy that has made significant strides in normalizing relations with other regional powers. This growing power imbalance in the region fueled competition and rising resentment. In particular, the perception among Palestinians has been that as Israel grew more prosperous, secure, and regionally integrated, it also became more uncompromising and unwilling to reach a political settlement with the Palestinians, themselves divided between East Jerusalem, Gaza—ruled by Hamas since 2007—and the West Bank, where tensions are high over settler expansion.

Allison Nathan: But why now for these attacks?

Emile Hokayem: Many factors were at play. The attacks marked the culmination of an ongoing debate within Hamas: is its primary purpose governance of Gaza, or is it total “Muqawama”—Arabic for “resistance”? The thinking was, if it's about governance, Israel has won, because Hamas was essentially boxed and trapped into a small territory, forced to abide by Israeli conditions. This was Netanyahu's driving assumption and a reason for Israeli complacency. Hamas hardliners, who are in control of the movement, have imposed Muqawama, with the welfare of the Gazan population only a lower and later priority. The attacks were their way of asserting Hamas as the only force of resistance against the Israeli occupation through guerilla and terrorist actions. Hamas now claims to be the real champion of the Palestinian cause, while the Palestinian Authority (PA) appears weak and hopeless.

In the run-up to October 7, Hamas also observed that Israel was embroiled in and distracted by domestic turmoil over proposed constitutional reforms. The attacks and their atrocious nature were designed to petrify Israeli society by shaking confidence in its leadership and security forces and puncturing its sense of invincibility. Hamas also viewed with alarm the normalization of relations between Israel and the UAE, Bahrain, Morocco, and possibly Saudi Arabia. The attacks were therefore an attempt to disrupt this shift. Hamas was also likely emboldened by the increased confidence of their regional ally and backer Iran, which survived the Trump era of maximalist pressure and has been on the winning side of recent wars and power struggles in Syria, Yemen, Iraq, and Lebanon. Hamas may well have wanted to become a shaper of regional dynamics.

Allison Nathan: But are the Palestinian cause and the Hamas cause one and the same?

Emile Hokayem: Hamas' stated end goal is the eradication of the Israeli state. Many Palestinians don't agree with that goal and are instead aiming for a free and sovereign state within the 1967 borders. Polling data prior to October 7 suggests that Hamas did not have broad support among Palestinians; it is an Islamist fundamentalist organization whose agenda does not necessarily align with Palestinian nationalist views. Its rule over Gaza was brutal, corrupt, and contested. So, the Palestinians are not Hamas and Hamas does not represent the entirety of the Palestinian people, and the two shouldn't be conflated.

The problem is that no person or entity really embodies the Palestinian nationalist agenda right now. The PA has lost legitimacy; many Palestinians consider it too corrupt and compromised by its relations with Israel and the US. As a result, in the heat of war, support for Hamas is currently rising among Palestinians, but it is unlikely to be deep or lasting. Over time, many Palestinians will probably rally to the view that October 7 was a significant setback for the primary goal of achieving statehood in the framework of a two-state solution.

Allison Nathan: Has Hamas succeeded in advancing its own goals with these attacks?

Emile Hokayem: Hamas has already achieved several goals. It is now much harder for Arab governments to justify or openly run their relations with Israel. Outside the Western world, perceptions of Israel have become more negative given the scale and nature of the Israeli military response. And, by forcing a negotiation over hostage releases, Hamas can claim that it is recognized as a legitimate actor that powerful countries and even Israel must deal with. By securing the release of many Palestinian prisoners held in Israeli jails, Hamas can also claim that it, not the quiescent PA, can force Israeli concessions.

Perhaps most critically, this conflict will shape the perceptions of two generations of Arabs about the Palestinian cause, which receded from the regional agenda in recent years. Palestine is now back at the center of Arabs' political psyche and priorities. The footage of destruction and suffering in Gaza will fuel anger and perhaps a new cycle of radicalization, which Hamas and other radical groups count on to recruit fighters and raise money. It's important to remember that success for Hamas isn't about the immediate wellbeing and prosperity of its population; it's about keeping alive the flame of the struggle.

Allison Nathan: Could the recent pause signal the beginning of the end of the conflict?

Emile Hokayem: The conflict is likely to last many months if not a year. The credibility of both Hamas and the Israeli leadership is on the line. For Hamas, releasing the remaining hostages now would basically amount to a death sentence; they maintain leverage only if they control and extend the

process. So, Hamas will aim to stretch out negotiations for as long as possible, even if that means more bloodshed. The goal is to exhaust Israel while waiting for international public opinion to turn against it. Hamas can't and won't seek what matters—a political settlement that enables the restoration of services and reconstruction crucial to the wellbeing of its massively battered population and ultimately leads to a state.

For Netanyahu, who is already facing severe criticism at home over the security failures of October 7 and the management of the war from all sides, unilaterally halting Israel's operation in Gaza would likely further damage his domestic reputation. He thinks that achieving victory, which he has defined as the total annihilation of Hamas, would restore his standing. But his goal isn't achievable, no matter Israel's military superiority. Hamas isn't just a group of hardened militants; it's an ideology, as resilient as it is radical. And that ideology has, if anything, received a boost since October 7, and will likely continue to thrive despite the suffering of millions of Palestinians. Even if Hamas could be annihilated, Israel doesn't seem to have a clear sense of the future of Gaza besides a long, hard occupation.

Allison Nathan: Is further regional escalation likely?

Emile Hokayem: The conflict in Gaza is already regional. Attacks against US targets in Iraq and Syria have occurred almost daily as Iran and its partners see the US as complicit with Israel. Fighting has also occurred between Israel and Hizbullah in Lebanon. And the Houthis in Yemen are involved. This is no rag-tag militia: they have access to ballistic and cruise missiles and UAVs and are strategically located in the Bab el-Mandeb Strait—a key artery for global trade. The Houthis have begun to disrupt maritime traffic by seizing and attacking ships.

But I'm a bit more skeptical that the conflict will evolve into an all-out regional war. The groups engaged in the peripheral fighting want to show support for Hamas, but are primarily focused on consolidating their domestic position and on harassing the US, which they consider their primary enemy. They won't substantially escalate the conflict unless they feel directly threatened. The player to watch is Lebanese Hizbullah, a formidable militia that is essentially Iran's ultimate instrument of deterrence and punishment. At this point, Hizbullah understands that the Lebanese population is opposed to entering the war. Tehran is unwilling to risk Hizbullah in an all-out war; instead, it wants to save the full force of Hizbullah in case Iran's leadership, territorial integrity, or command and control come under direct attack. In other words, Iran is saving Hizbullah for "the big one", and the war in Gaza is not it.

But this calculus could change. If the fighting in Gaza and the West Bank escalates significantly and Hamas is indeed on the verge of extinction, Iran may begin to believe that its credibility could be at stake if it doesn't do anything to help its ally Hamas. An easy victory may embolden Israel, which could target other Iranian partners in the region or even Iran itself, which would lead to a sizable further widening of the conflict. In contrast, if Israel struggles or fails, then Iran and its partners may look for more opportunities to further harass a weakened Israel.

I would argue that whether the conflict widens further currently depends on Israel. Will it feel compelled to turn its sights on other hostile groups and countries in the region to ensure an

event like October 7 never happens again? That's the key question. And amid all of this, the potential for a miscalculation that turns the conflict into an all-out war remains significant; rational actors can make a strategic decision not to escalate and still become entangled in an escalatory spiral.

Allison Nathan: What are you watching for signs on how the conflict might evolve from here?

Emile Hokayem: First, the negotiations over the remaining Israeli hostages, which will determine the tempo of Israeli operations. And second, the humanitarian crisis in Gaza, which will influence Arab states' position and shape international public opinion. The scale and speed of the unfolding crisis is unprecedented in modern warfare, with the entirety of the Gazan population—over two million people—lacking access to shelter, heat, water, food, medicines, sanitation, and hospitals.

The humanitarian crisis will have immense consequences for the entire region. Arab states are largely distrustful, if not outright opposed to, Hamas. But they worry about their own stability and must consider their domestic populations, which are overwhelmingly empathetic to the plight and displacement of the Palestinians. Also, these states oppose a potential Israeli occupation of Gaza and are extremely concerned about the prospect of the war spreading into the West Bank.

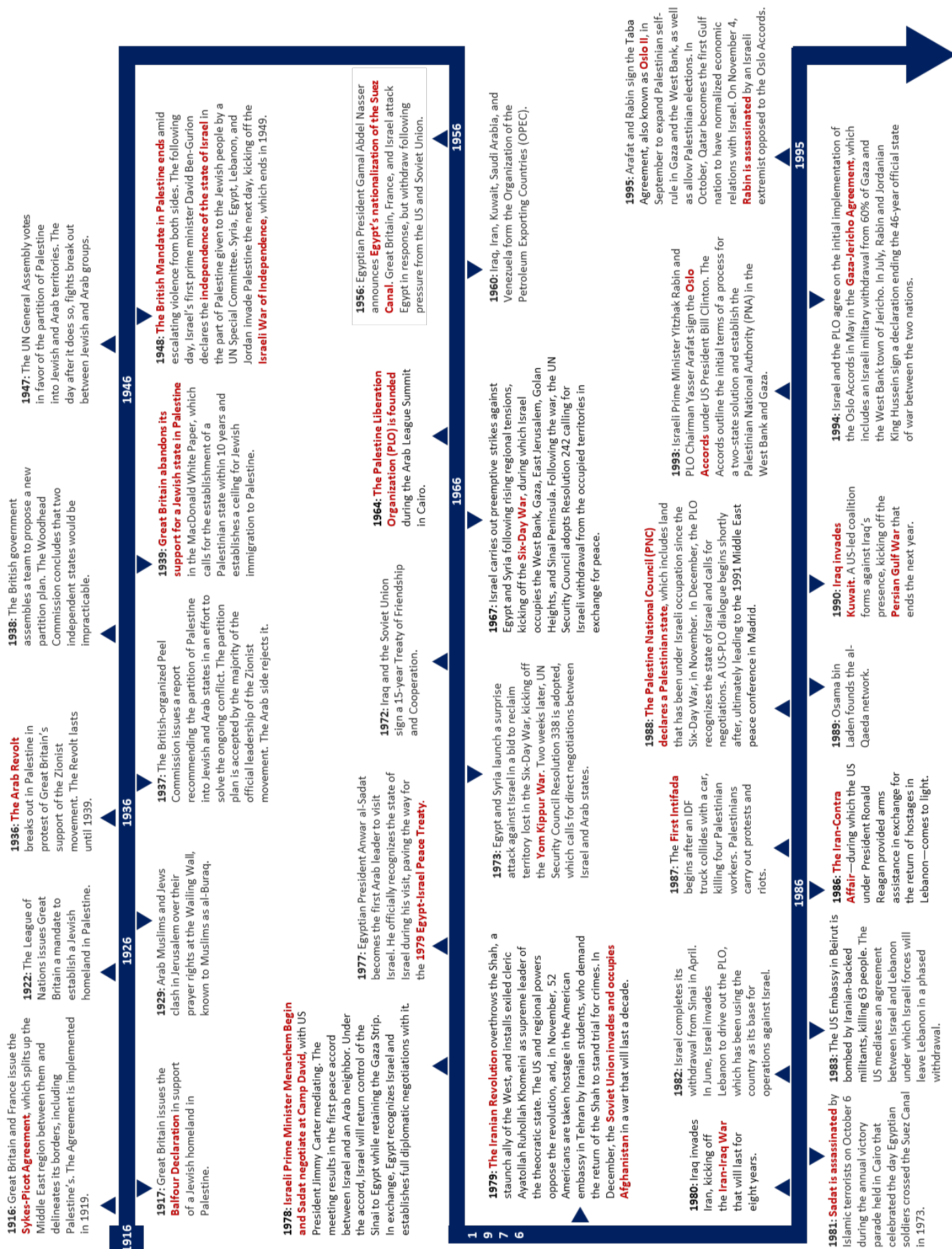
Allison Nathan: How is the balance of power in the Middle East likely to shift post this conflict?

Emile Hokayem: Israel was and will remain the most militarily powerful country in the region. But psychologically, Israel is now in a different place than pre-October 7, feeling very insecure and vulnerable, and likely rethinking its security posture in the region. Relatedly, the US will likely get more involved in the region, even as it wants the opposite given the Russian and Chinese challenges. Meanwhile, Iran and its regional allies are emboldened. Their thinking is that with a bit more patience, resources, and determination, they could achieve the big victory they have sought for decades—a forced US exit from the Middle East. Iran's main enemy is the US—not Israel, which Iran views as just an artificial and brittle outpost of Western imperialism. Tehran has long believed that US presence in the region constrains its own power, but thinks that may be ending, aided by shifting global power dynamics as China and Russia defy the Western security order worldwide. So, I don't see a stable balance of power emerging; each player will have an interest in ramping up their military posture.

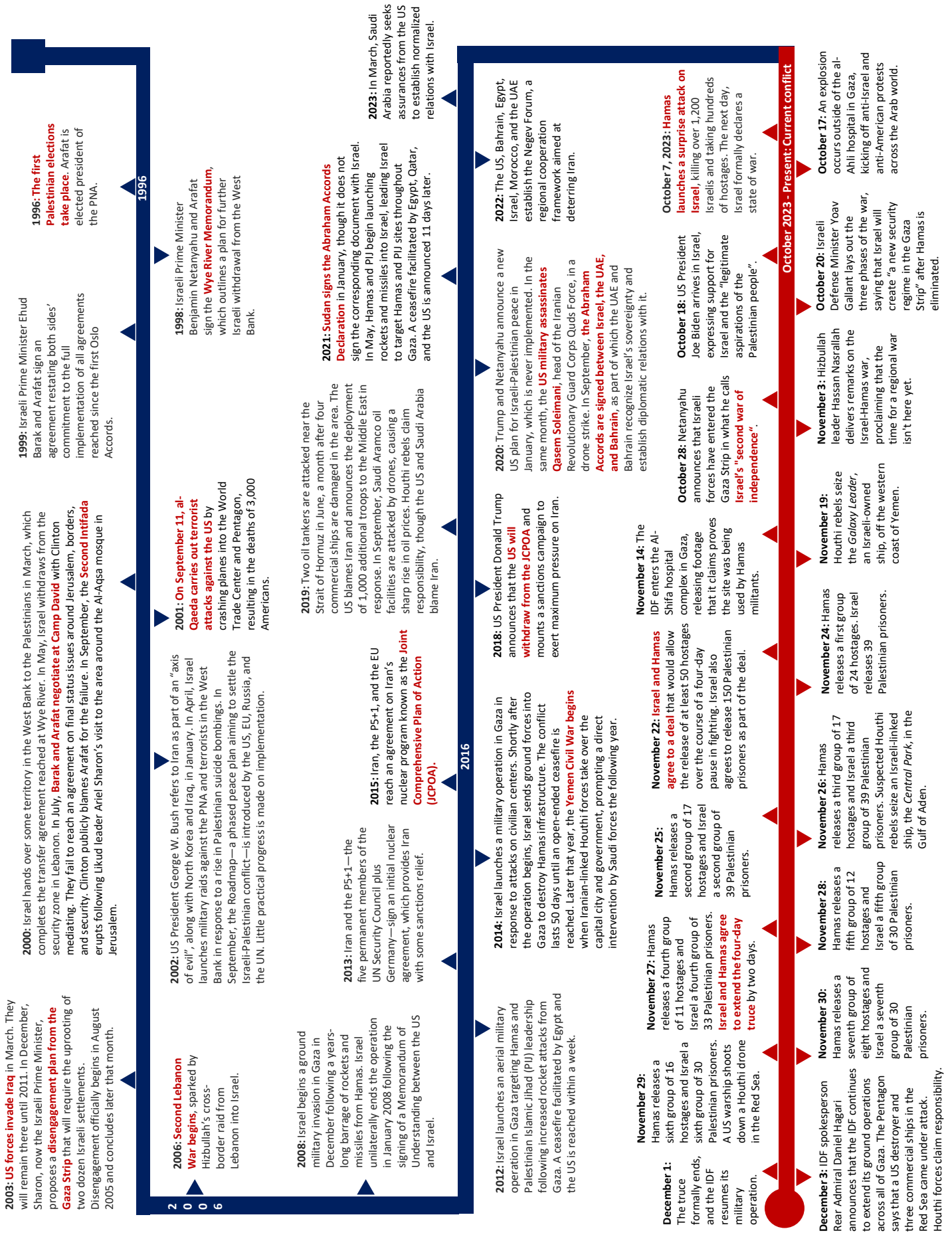
Allison Nathan: What does a stable outcome for the region look like, and how achievable is it?

Emile Hokayem: We know on paper what a stable outcome is: a viable Palestinian state alongside a secure Israel, a set-up that would no longer inflame passions and would lead to regional peace. In the process, a contained and defanged Iran would be given a place and a stake in a new regional security architecture. Such an outcome is now elusive, not only due to the current explosion of violence, but also because conflicts in the Middle East are a complex mix of issues of land, identity, ideology, and grievances. So, sadly, I expect more instability in the months and years ahead that affects the region and its near abroad given that the main externalities of Middle Eastern instability, migration, and terrorism, are transnational.

Israel and Palestine: A brief history



Source: Council on Foreign Relations, PBS, NPR, various other news sources, Goldman Sachs GIR.



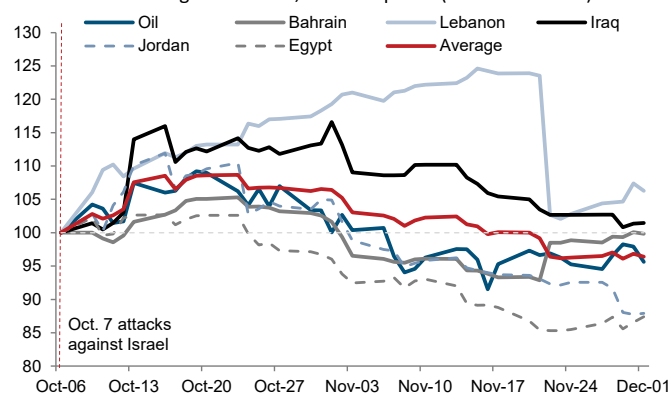
Markets: beware complacency

Farouk Soussa warns investors not to be complacent about the potential impacts of the Middle East conflict on regional assets and economies

Market concerns around the potential risks posed by a regional escalation of the Israel-Hamas conflict appear to have receded. These concerns initially led to a widening of the credit spreads of several regional sovereigns perceived to be most exposed to such an escalation, including Jordan, Lebanon, Iraq, Egypt, and Bahrain. They also drove a modest spike in oil prices. These moves have now fully reversed, with the notable exception of Lebanese credit spreads, which remain relatively wide. Indeed, oil prices are now lower than they were immediately prior to the October 7 attacks on Israel, and the credit spreads of countries such as Egypt have tightened significantly. But are markets right to so fully discount the risks posed by the conflict? While the risk of a wider regional conflict appears to have diminished, we caution against complacency. We would also note that even in the absence of a wider conflict, some regional economies may remain under pressure.

Oil and most regional risk assets have fully recovered from their initial selloff post the October 7 attacks against Israel

Yield on selected regional credits, Brent oil prices (October 7 = 100)



Source: Bloomberg, Goldman Sachs GIR.

Risk of a regional escalation has receded but not vanished

The probability of an all-out regional conflict seems to have diminished significantly. Fears that a ground incursion by Israel into Gaza would trigger retaliatory strikes by regional actors, or indeed preemptive strikes by Israel against these actors, have not materialized at this point. Moreover, the passage of time has reinforced the perception that a regional conflict, which would risk further drawing in external powers such as the US, is in no one's interest.

That said, we would warn against complacency. The conflict has raised tensions and increased hostilities along Israel's northern border with Lebanon and has precipitated several attacks against US military interests in Iraq and Syria. Several missiles have also been fired at Israel from Yemen, and Houthi rebels there recently hijacked a ship they claimed to be Israeli, raising risks to seaborne traffic in the Bab el-Mandeb Strait through which trade via the Suez Canal flows. While further escalation may not be in anyone's interest, in such an environment the risk of a miscalculation that could inadvertently

lead to a regional escalation is materially higher than it was pre-October 7. While quantifying this risk is difficult, we think even a very low probability of a widening in the conflict would argue for pricing in some risk premium given the significant impact this would have should it materialize. Certainly, the possibility of this, however low it may be, should limit any near-term upside for regional risk assets.

Impacts even without a regional escalation

Even in the absence of a regional escalation, the Israel-Hamas conflict is already posing challenges to regional economies. Markets are pricing these in where the challenges are most immediate and apparent, such as in Lebanon, but not elsewhere—despite the high probability that the war in its current state will still have a meaningful economic impact.

Nowhere is this more apparent than in Egypt, where the war is already negatively impacting the tourism industry. [Local press reports](#) of a sharp rise in holiday cancellations in places such as Sharm-al-Shaikh, a popular resort town in the Sinai peninsula, do not augur well for tourism receipts this year. Indeed, we have estimated that in a downside scenario that saw a 33% decline in tourism revenues—similar to past shocks to the industry—the hit to tourism alone could cost Egypt in the neighborhood of \$5bn in lost revenues this fiscal year. Given the country's already precarious FX position, this would be bad news for investors in Egypt's external sovereign bonds.

So why are Egypt's credit spreads tighter than they were before the October 7 attacks? We think the answer partly lies in the market's perception that the conflict has underscored Egypt's geopolitical importance and has increased the likelihood of financial support from regional and international partners, such as the GCC countries, the European Union, and the IMF. While we agree that more financial support is likely to offset the negative impact of the conflict and help Egypt avoid a balance-of-payments crisis, Egypt's economic outlook remains challenging and, in the absence of much more progress on reforms, we see few prospects for an improvement in the country's creditworthiness. In other words, we think more help from regional and international partners would, at best, allow Egypt to continue just 'muddling through'. While this would be positive for short-dated bonds, which would benefit from a lower likelihood of near-term default, the upside for longer-dated Egyptian bonds would likely remain limited.

Look to Gulf oil exporters for hedges

Unlike Egypt, we think oil-exporting Gulf countries—which collectively account for around 60% of the region's GDP—are unlikely to be significantly impacted by the conflict in the absence of a regional escalation. Indeed, Kuwait City and Riyadh are the closest Gulf population centers to Gaza and are about as far away from Gaza as Chicago is from New York or Milan is from London. Even in the event of a regional escalation, the fiscal and external dynamics of these countries are likely to *benefit* from the resulting increase in oil prices (see pg. 18), which makes their sovereign debt a fairly attractive hedge against such an outcome, in our view.

Farouk Soussa, Senior MENA Economist

Email: farouk.soussa@gs.com
Tel: 44-20-7051-9349

Goldman Sachs International

Structural shifts, greater resilience

Tadas Gedminas argues that the structural shifts in Israel's economy over the past two decades have reduced its vulnerability to economic and financial shocks

As the war between Israel and Hamas enters its third month, assessing the impact on Israel's economy remains challenging. The central bank of Israel has estimated that the absence of thousands of workers from their jobs—including over 300k reservists that have been called up for duty—[translates to a 6% drag](#) on Israel's GDP for each week the conflict continues (in annualized terms). But the ultimate hit to Israel's economy will depend significantly on the duration of the conflict and how it unfolds—both of which remain highly uncertain. Notwithstanding this uncertainty, we think that several structural changes in the Israeli economy over the past 20 years have reduced its financial and economic vulnerabilities to current and future shocks.

A strong external position, due to structural shifts...

One of the most important of these structural shifts has been the growth of the high value-added IT and technology service sectors, which now represent a major part of Israel's economy. Indeed, the share of GDP accounted for by these sectors has increased from around 10% in the late 1990s to close to 20% today, while the share of manufacturing has declined from around 18% to 14% over the same period.

The shift towards high-tech services—which are tradable and can be exported—has also had important implications for Israel's external position, transforming the country from a net borrower to a net lender to the rest of the world. Israel's balance-of-payments position provides evidence of this, with a 4% of GDP current account deficit in the late 1990s and early 2000s turning into a 4% of GDP surplus beginning in the mid-2010s as the country's high-tech service export capacity developed. Israel's external position has benefitted further from the discovery of natural gas fields in the early 2000s, which has reduced Israel's net energy import needs, and from significant foreign direct investment that supported the development of the country's high-tech sectors.

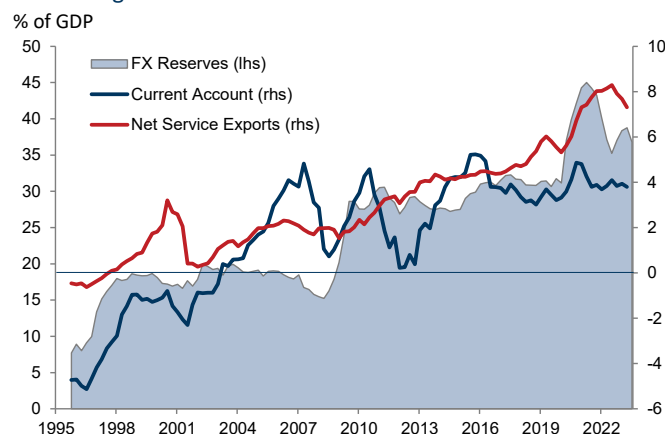
...has reduced economic and financial vulnerabilities

The improvement in Israel's balance-of-payments position has allowed it to accumulate substantial financial buffers as hard currency has flowed into the economy, with the Bank of Israel's stock of FX reserves rising to close to 40% of GDP—or around \$200bn—by the end of September 2023. The shift from a current account deficit to a surplus has also reduced the country's reliance on foreign capital inflows.

These factors have, in turn, reduced Israel's economic and financial vulnerability to shocks and eased the burden on policymakers to address financial stability concerns from the current conflict. The central bank's significant FX reserve position gave it ample means to intervene in the FX market to stem the depreciation pressures on the Shekel immediately following the October 7 attacks. The intensity of the pressures was also smaller than in previous conflicts given the reduced

importance of foreign portfolio investors and related outflows, as well as overall lower external financing needs. While concerns around financial stability risks are likely to linger as long as the conflict continues, with the Shekel now standing stronger versus the Dollar than before the conflict, investors' perception of these risks has receded, and their confidence in policymakers' ability to ensure financial stability has increased.

Israel has shifted from a net borrower to a net lender and has accumulated significant FX reserves as its economy has shifted toward high-tech services

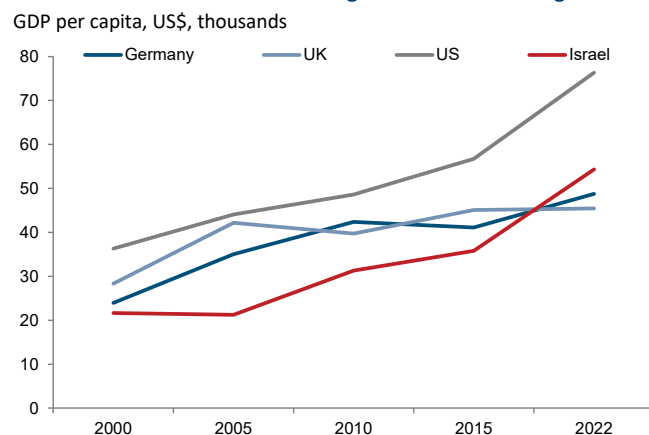


Source: Central Bureau of Statistics, Bank of Israel, Haver Analytics, GS GIR.

A story of resilience

Despite the current conflict, Israel has been an economic success story, and the development of its high-tech and high value-added sectors has contributed to a significant increase in living standards over the past 20 years. The development of these sectors also puts Israel in a strong position to benefit from a potential AI-driven productivity boost, with our global economists finding that Israel would be one of the largest beneficiaries of such a boost. While assessing the medium- and long-term prospects of the country while the conflict is ongoing is difficult, the positive structural economic changes of the past 20 years have made Israel's economy more resilient to the challenges it is currently facing, as well as any it may encounter in the future.

Structural shifts have led to a large rise in Israeli living standards



Source: IMF, Haver Analytics, Goldman Sachs GIR.

Tadas Gedminas, EM Strategy Research

Email: tadas.gedminas@gs.com
Tel: 44-20-7051-6015

Goldman Sachs International

Interview with Jared A. Cohen

Jared A. Cohen is President of Global Affairs and co-head of the Global Institute and Office of Applied Innovation at Goldman Sachs. Below, he discusses how the Middle East conflict could evolve and the potential implications for the regional and global geopolitical landscape.

The interviewee is an employee of the Goldman Sachs Executive Office Division, not Goldman Sachs Research, and the views stated herein reflect those of the interviewee, not Goldman Sachs Research.



Allison Nathan: How does the current Israeli-Hamas war compare to past conflicts involving Israel?

Jared Cohen: Hamas' October 7 attacks on Israel marked the greatest loss of Israeli lives since the establishment of the Jewish state in 1948 and the greatest loss of Jewish lives in a single day since the

Holocaust, which in and of itself distinguishes the gravity of this conflict. People often compare this to the 1973 Yom Kippur War because an intelligence failure played a central role in both wars. But the current war is different in that rather than fighting a group of neighboring Arab states, as was the case in the Yom Kippur War, Israel is fighting terrorist groups. Hamas is front and center in that, but several splinter groups are also holding Israeli hostages, and Iran-sponsored proxies, including Hizbullah in Lebanon, the Houthis in Yemen, and various Shia Arab militias in Iraq have entered the conflict.

Another distinctive feature of this war is that it is being fought in a different context of regional partnerships. Israel has much closer ties to many of its Arab neighbors today than has ever been the case historically; Morocco, Sudan, Bahrain, and the UAE are all signatories to the Abraham Accords that normalized relations with Israel. More broadly, the center of power in the Arab countries now resides in a handful of economic powerhouses—Saudi Arabia, the UAE, and Qatar—that want their economic interests to drive geopolitics rather than the other way around, as had largely been the case when the core Arab countries—Iraq, Egypt, and Syria—were the dominant actors in the region. Saudi Arabia continues to signal a desire to move toward normalized relations with Israel, even if this conflict will undoubtedly delay progress toward this goal.

Global powers are also less engaged in the Middle East than they were during the Global War on Terror that prevailed for the two decades prior to the onset of the pandemic. While the US remains focused on stability, particularly in global energy markets, its leverage in the region has declined in recent years, and it is now more preoccupied with great power competition with China and the war in Ukraine. China, for its part, has had less interest in the Middle East beyond its transactional trading relationship. And European leaders have been largely absent.

Finally, Israel has never been at this scale of a war in this type of social media environment, where the battle for the hearts and minds of the world is playing out on TikTok and other social platforms that are prone to dis/misinformation and content being taken out of context. The social media narrative is not only carrying weight with populations around the world, but also with governments making strategic decisions about the war, which is a formidable challenge for Israel to navigate.

Allison Nathan: What does all this mean for how the conflict could play out?

Jared Cohen: Iran's main objective right now is to destabilize the region, leveraging its proxy groups that are on the front and peripheral lines of the conflict today—again, Hamas and Palestinian Islamic Jihad in Gaza and the West Bank, Hizbullah in Lebanon, the Houthis in Yemen, Bashar al-Assad's regime in Syria, Shia Arab militias in Iraq, etc.—to that end. How aggressively it decides to move these chess pieces to continue to generate instability will be a key determinant of the course of the war. A direct military confrontation between Iran and Israel is a key pathway through which the conflict could escalate, but I don't believe such a confrontation is likely at this point.

The regional economic powerhouses, for their part, each seem to have their own agendas that promote their individual interests, which marks a shift for a region that in the past has engaged collectively and as a more united front. Qatar, for example, has endeavored to position itself on the world stage as a country that speaks to all actors and is therefore well placed to facilitate negotiations, as has been the case in the current conflict and past ones. And it also aims to continue building economic connectivity with the rest of the world, scarred by the memories of the 2017-2021 blockade, which Qatar never wants to experience again.

The UAE, meanwhile, is focused on retaining its status as the commercial nerve center of the Middle East, with the headquarters of virtually every global company with a regional hub located there. And Saudi Arabia wants to grow its economy from the 18th largest economy to the 10th largest economy in the world and doesn't view itself as a Middle Eastern country solely, but also as a global player that is located in the Middle East. Within these countries, commercial engagement with Western businesses has continued largely without disruption even during the worst days of the fighting, which says a lot. All that said, we need to watch both dis/misinformation around this conflict and humanitarian costs, which create political pressure for these governments.

Allison Nathan: How might the conflict alter the dynamics/balance of power in the Middle East?

Jared Cohen: The economic renaissance of the wealthy Arab countries is here to stay, which will enable them to remain the center of power and influence in the region for a long time to come. The US will likely feel compelled to stay more militarily engaged in the region than it would prefer for as long as the Iranian regime and its proxies remain destabilizing forces. Iran, in turn, is likely to grow closer to China and Russia. The recent events have served as a reminder to the Gulf states and beyond that threats from Tehran are quite real despite the recent China-brokered normalization between Iran and Saudi

Arabia. So, the axis of Iran, China, and Russia will likely emerge as a new feature of the Middle East.

As for Israel, the expansion of the Israeli-Sunni Arab normalization will likely remain on pause for some time. But, again, the Gulf states, which are generally ruled by young leaders, see the normalization of relations with Israel as an integral aspect of their economic agenda, so I expect this to happen in my lifetime, if not necessarily imminently. And, while this is undeniably a very painful chapter for Israel, it is set to emerge from this conflict stronger and more united; following the last year, which was arguably the most divisive period in the country since the founding of the state of Israel, these events have forced Israel to rediscover its national identity. Given the priorities of the Gulf states today, when this is all over, I think Israel will find itself in a neighborhood that is actually more hospitable.

That said, it's clear that Israel's policy of deterrence and containment relative to its hostile neighbors is no longer viable. The implications of that, however, remain unclear, which is the constant quagmire of fighting terrorism. Israel may very well succeed in dismantling Hamas as a centralized terrorist organization, as the US essentially did with al-Qaeda and ISIS, but the overall movement and ideology will persist, as will many of its foot soldiers, who will likely just gravitate to other, like-minded organizations. Indeed, the nature and scale of the brutality of the attacks on October 7 looked more like past attacks perpetrated by ISIS than by Hamas, which suggests that Hamas may now have a new generation of fighters within its ranks that were part of or inspired by other terrorist groups. This is particularly concerning because such a loose confederation of splinter groups now fighting with Hamas may be more difficult to control. And the very act of trying to eliminate these organizations inevitably creates the conditions for a new batch of terrorists, which is why the world has been fighting violent extremism for 2000 years with limited success.

And, of course, what this all means for the future of the Palestinians in Gaza as well as in the West Bank also remains exceptionally unclear. Mahmoud Abbas, the current leader of the Palestinian Authority, is 87 years old and there have been longstanding concerns about his health. The task of garnering both credibility with the Palestinian population and acceptance from Israel will be daunting for any new Palestinian leadership. So, what the future holds for Palestinians is uncertain.

Allison Nathan: What implications could the conflict have for the world more broadly?

Jared Cohen: While people are worried about the prospect of regional contagion, I'm more concerned about the broader contagion and consequences that are already playing out in the form of migration and refugee crises that have historically affected Europe, and especially a potential resurgence in extremist violence. The pervasive imagery on social media, combined with a more acute migration crisis, has the potential to write an entirely new chapter of violent extremism that I doubt we're prepared for. Remember, watching footage of the destruction of Muslim enclaves in Bosnia is what radicalized the 9/11 hijackers.

Allison Nathan: How do the Middle East developments fit into the current state of global geopolitics?

Jared Cohen: Prior to October 7, people used to ask me what keeps me up at night. My answer was always that the threat of violent extremism that placed the War on Terror at the center of global geopolitics and US foreign policy for two decades following 9/11 did not just disappear with the onset of Covid, which pulled the geopolitical center of gravity to the great power competition between the US and China. So, my fear has been that another terror attack would once again strike at a time when the world was no longer prepared to deal with it; a paradigm focused on dealing with great power competition is just not applicable to dealing with terrorist attacks. That the attacks I worried about occurred in the context of the Israeli-Palestinian issue surprised me. But, as Eurasia Group's Ian Bremmer and I recently wrote in our piece, "[The global credibility gap: Assessing underperformance and overreach in today's geopolitics](#)", identifying the next geopolitical inflection point is largely a function of when countries stop being predictable. And especially when major powers go off script, it forces everybody else to go off script. So, the US pivoting toward China, and going off their script for the Middle East that had prevailed for two decades, created different pockets of vulnerability that manifested itself in an unexpected way.

Allison Nathan: What are the implications of the current conflict and the broader rise in geopolitical instability for companies and investors?

Jared Cohen: This conflict on the heels of Russia's invasion of Ukraine underscores the fragility of geopolitical stability not only in the Middle East, but in the world more broadly. Historically, the nexus between geopolitics and business was relatively niche, concentrated in the energy and technology sectors. Today, not a single business in any sector is immune from geopolitical dynamics, whether it be the unfolding developments in the Middle East that have significant implications for migration, security, and potentially energy supply or the great power competition between China and Western powers that has already meaningfully impacted supply chains around the world. That said, the market impacts of the current conflict are likely to remain limited unless a major escalation that disrupts energy supplies occurs, which seems relatively unlikely at this point. And the resilience of economic and business activity in the Middle East despite the heightened instability, if anything, leaves me more bullish on its potential.

It's also notable that the US-China competition that now dominates the global geopolitical agenda has not appropriated the war in the Middle East, which underscores the unique position of the Arab Gulf countries today as geopolitical swing states whose support both Washington and Beijing need at times. This status has enabled the Gulf states to continue pursuing their own agendas and avoid a situation in which either the US or China exploits the war in furtherance of their aims within this great power competition. And it marks a major shift in the geopolitical importance of the Middle East. My sense is that businesses have increasingly appreciated this shift as well as the importance of fine-tuning their geopolitical instincts and understanding more broadly to successfully navigate an increasingly complex geopolitical world.

Multi-asset portfolios: lines of defense

Christian Mueller-Glissmann lays out several ways investors can manage geopolitical risk in multi-asset portfolios

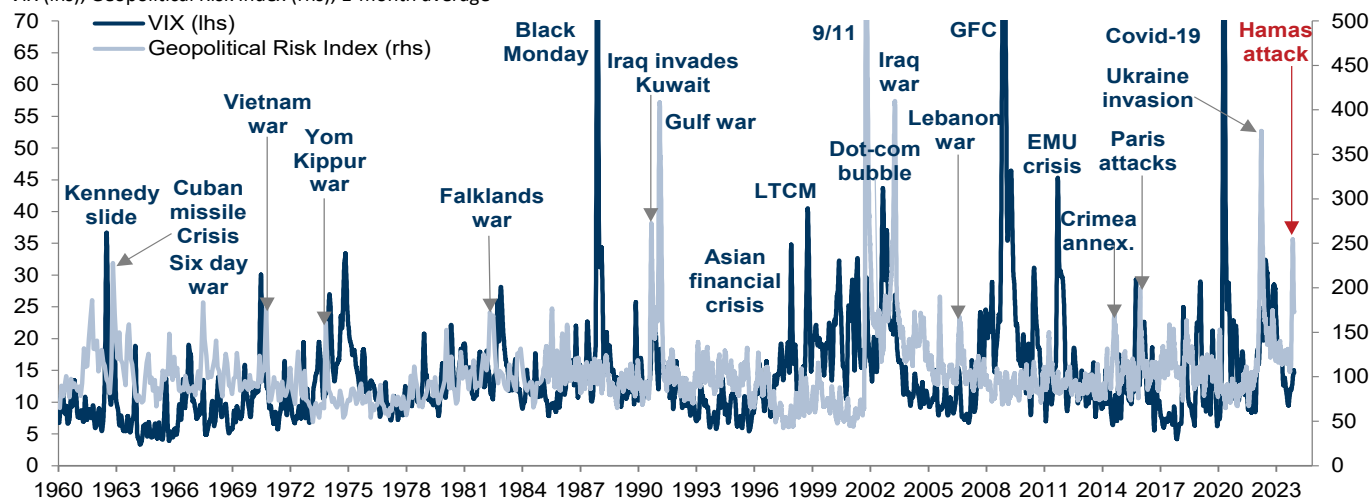
Amid an increasingly fraught geopolitical landscape in the wake of Russia's invasion of Ukraine last year, lingering concerns around Mainland China-Taiwan tensions, and, most recently, the conflict in the Middle East, geopolitical risks have become an important driver of markets. Indeed, geopolitical shocks can materially impact global growth, inflation, and sentiment, especially as economies and markets have become more global and assets more correlated. However, the highly uncertain nature of geopolitical shocks means that asset allocators face a particularly daunting task in constructing portfolios to withstand a mix of potential outcomes, especially in the face of ever-present 'unknown unknowns' that can seemingly come out of nowhere. To manage these risks, an investor's first line of defense is a well-diversified portfolio, which allocations to select safe havens, commodities, and option hedges that can pay off in multiple scenarios can enhance.

Shocking geopolitics: hard to defend against

The impact and timing of geopolitical events are hard to anticipate, and history suggests that geopolitical shocks fail to have consistent impacts across assets, in part because macro conditions at the time matter. Taking a view on how geopolitical events might unfold is similarly difficult given high uncertainty and multiple potential outcomes, including a reversal of the shock, which might result in material market timing risk. Indeed, in some cases, uncertainty can decline rapidly as more information becomes available, with equities tending to consolidate in periods of rising geopolitical risk and rallying sharply after its peak. On the flipside, in other cases, geopolitical shocks can have more lasting impacts on economies and markets. To complicate matters further, geopolitical shocks often initially manifest as local shocks but they can extend and have knock-on effects globally. As a result, positioning around geopolitical tail risks, which have a low probability of materializing but a large and rapid impact on assets when they do, is very difficult.

Large increases in geopolitical risk have historically triggered equity volatility spikes

VIX (lhs), Geopolitical Risk Index (rhs), 1-month average



Note: Last value shown is 11/30/2023. We use S&P 500 realized vol instead of VIX before 1990.

Source: Bloomberg, [Dario Caldara & Matteo Iacoviello](#), Federal Reserve Board, Goldman Sachs GIR.

Diversification: the first line of defense

That said, investors can cushion their portfolios from the worst of geopolitical shocks in several ways. First and foremost is robust portfolio construction and diversification—what Harry Markowitz famously called “the only free lunch in investing.” A balanced portfolio, e.g. 60% equities and 40% bonds, should provide some buffer against unanticipated growth shocks, including those from geopolitical events. However, bonds cannot buffer equities as reliably when inflation is elevated, as has been the case for the last two years. And bonds become an even less effective hedge if the geopolitical shock increases inflation risk—a particular concern amid the current Middle East conflict that could lead to higher energy prices (see pg. 18).

Hedging: the second line of defense

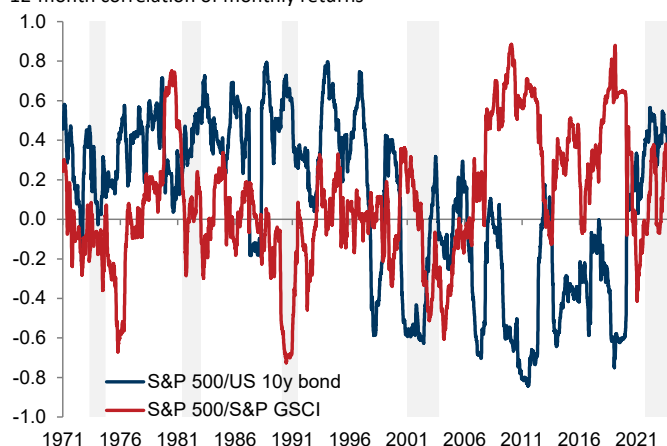
To further buffer geopolitical risk, investors may want to increase allocations to assets that could benefit from an escalating shock. Indeed, sometimes the best hedges are those assets whose supply is disrupted by a geopolitical shock. Amid the current Middle East conflict, which could disrupt oil supplies if it escalates further, energy-related exposures could be a core diversifier. During previous Middle East conflicts such as the Yom Kippur War (1973), Gulf War (1991), and Iraq War (2003), as well as during Russia's invasion of Ukraine, commodities, and importantly oil, became negatively correlated to equities as bonds struggled to buffer them. Defense stocks are also a potential beneficiary of growing geopolitical conflicts. A related approach to managing geopolitical risk in portfolios is avoiding direct or indirect exposures. This might include avoiding the country/region facing elevated geopolitical risk or reducing indirect exposure from trade linkages, etc. For example, in the event of sharply rising oil prices, investors may want to avoid countries, currencies, or companies that are large energy consumers. However, allocating more to commodities and avoiding affected areas due to near-term concerns can lead to a worse risk/reward for portfolios in the medium term and increase market timing risk if geopolitical shocks reverse.

Investors can also turn to safe haven assets, which tend to hold or gain value when global risk conditions worsen. Traditionally, such assets included gold and currencies like the Dollar, Yen,

and Swiss Franc. However, we favor a more selective approach given that the performance of safe haven assets depends on the nature of the shock and broader macro conditions. Many safe havens tend to perform well during growth shocks but suffer during rate shocks. Indeed, over the last two years, the Dollar has been a successful safe haven as it benefited from a particularly hawkish Fed, while other safe havens—including the Yen and gold—have often suffered amid rising US yields. The Yen is particularly sensitive to US rates, so it remains an unattractive hedging option for investors, especially as the Bank of Japan has materially lagged other DM central banks in tightening policy. On the other hand, the Swiss Franc, which is impacted by fewer negative cross-currents, has become a more effective ‘risk off’ hedge vs. the Euro. All that said, it is important to keep in mind that while safe haven assets tend to outperform during ‘risk off’ episodes, they usually have lower returns through the cycle. Thus, investors again need to consider the trade-off between risk reduction and returns.

Commodities were a key diversifier during previous energy supply disruptions due to geopolitical shocks

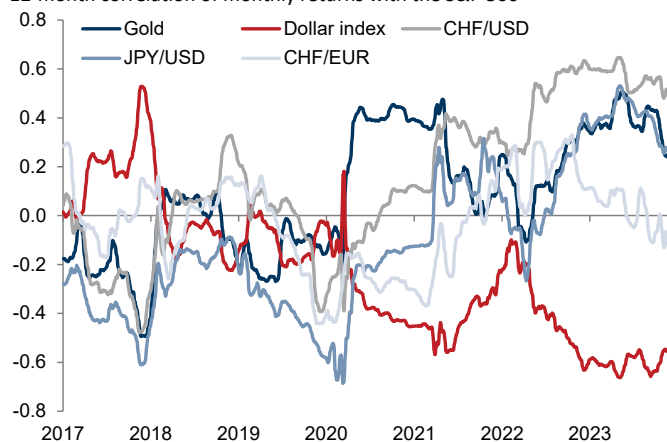
12-month correlation of monthly returns



Note: Grey shading denotes periods of high geopolitical risk. Source: Haver Analytics, Bloomberg, Goldman Sachs GIR.

Several safe havens exist that can help buffer equity drawdowns, but their effectiveness depends on the shock

12-month correlation of monthly returns with the S&P 500



Source: Haver Analytics, Bloomberg, Goldman Sachs GIR.

Finding win-win scenarios

The risk that geopolitical shocks occur and reverse quickly would suggest increased value of options as a hedge, but

hedging tail risk with options can be expensive, making prolonged exposure to risk management strategies that protect portfolios systematically unfeasible. Given that, we prefer buying options on safe havens or risky assets that pay off in multiple ‘risk off’ scenarios, not just geopolitical shocks. For example, buying calls on the Dollar vs. Euro not only provides a hedge against geopolitical shocks given the Dollar’s role as a safe haven and the US’ decreased vulnerability to higher energy prices, but also can protect against a potential US rate shock if inflation reaccelerates and an increase in Euro area sovereign risk. Indeed, implied volatility on safe assets—excluding bonds—is relatively low now, having reset from an initial spike following Hamas’ attacks on Israel, making it a particularly attractive hedge. Implied equity volatility, including for the S&P 500, has also declined and sits below its long-term average, though this is due to a relief rally amid falling bond yields. Oil volatility, however, remains elevated, making related option hedges less attractive right now. All told, hybrid options that combine multiple views can help reduce hedging costs and protect against more specific ‘risk off’ scenarios—a hybrid option that pays off if the S&P 500 is down with oil prices up can provide an effective hedge against energy disruptions.

Implied volatility for the S&P 500 and safe assets outside of bonds is relatively low

10-year percentile of 3-month implied volatility



Source: Haver Analytics, Bloomberg, Goldman Sachs, Goldman Sachs GIR.

Geopolitical risk: hard to ignore

Investors with well-diversified portfolios might be tempted to ignore geopolitical risk, and recent declines in safe havens and oil prices suggest some investors have indeed relaxed after the initial shock from the conflict in the Middle East. But, given lingering vulnerabilities, especially as risk premia remain low, investors would benefit from enhancing their diversification with select safe havens, allocations to commodities, avoiding negatively affected areas, and selective option hedges that can pay off in multiple scenarios. In particular, we believe long positions in the Dollar and Swiss Franc vs. FX of energy consumers, as well as exposure to gold volatility, should prove effective hedges against geopolitical risk today. Additionally, given the strong relief rally in risky assets in Q4 and with the large volatility reset, hedging with simple equity puts or put spreads might also be a good choice.

Christian Mueller-Glissmann, Sr. Multi-Asset Strategist

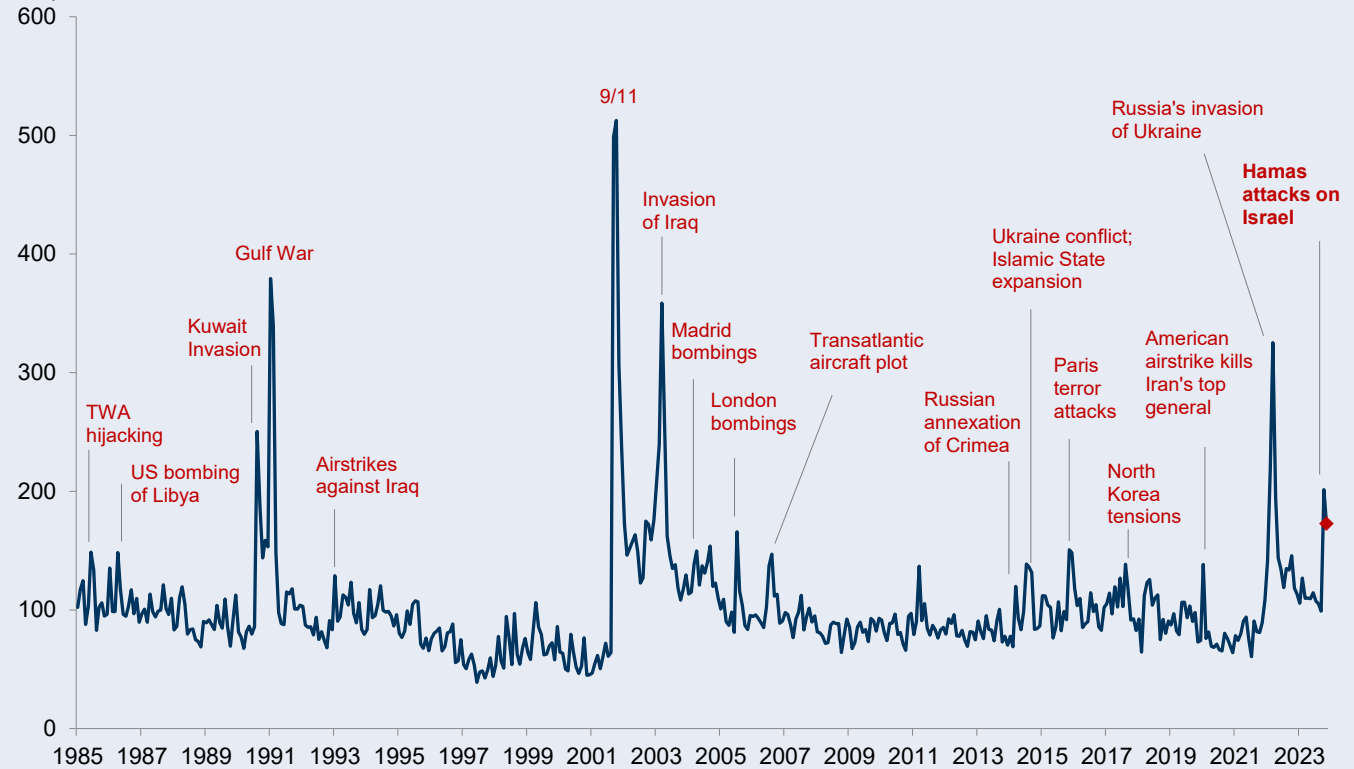
Email: christian.mueller-glissmann@gs.com Goldman Sachs International
Tel: 44-20-7774-1714

Geopolitical risk through the years

Geopolitical tensions, which take many different forms, are difficult to measure. One proxy for assessing the geopolitical environment is the news-based Geopolitical Risk Index developed by economists from the Federal Reserve Board.

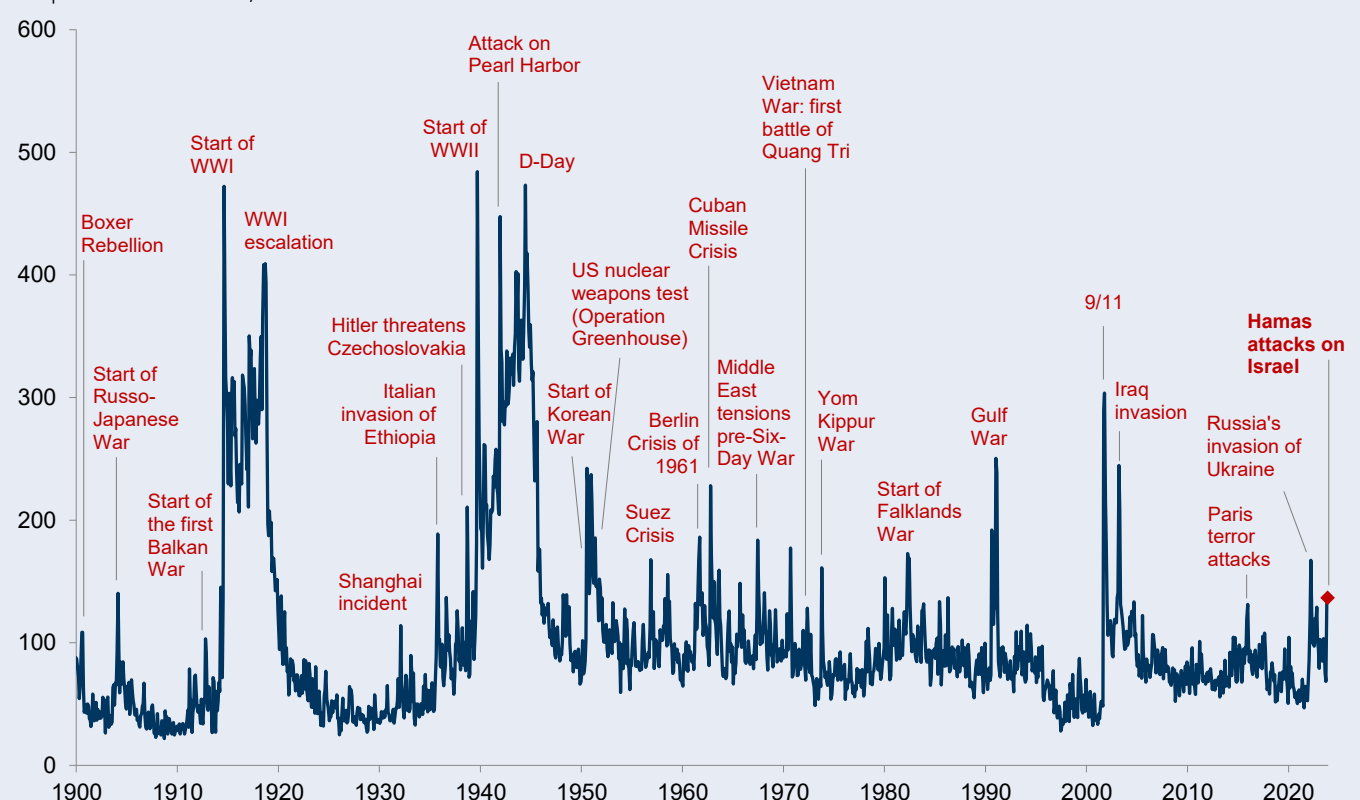
1985-Present

Geopolitical Risk Index, 2019=100



1900-Present

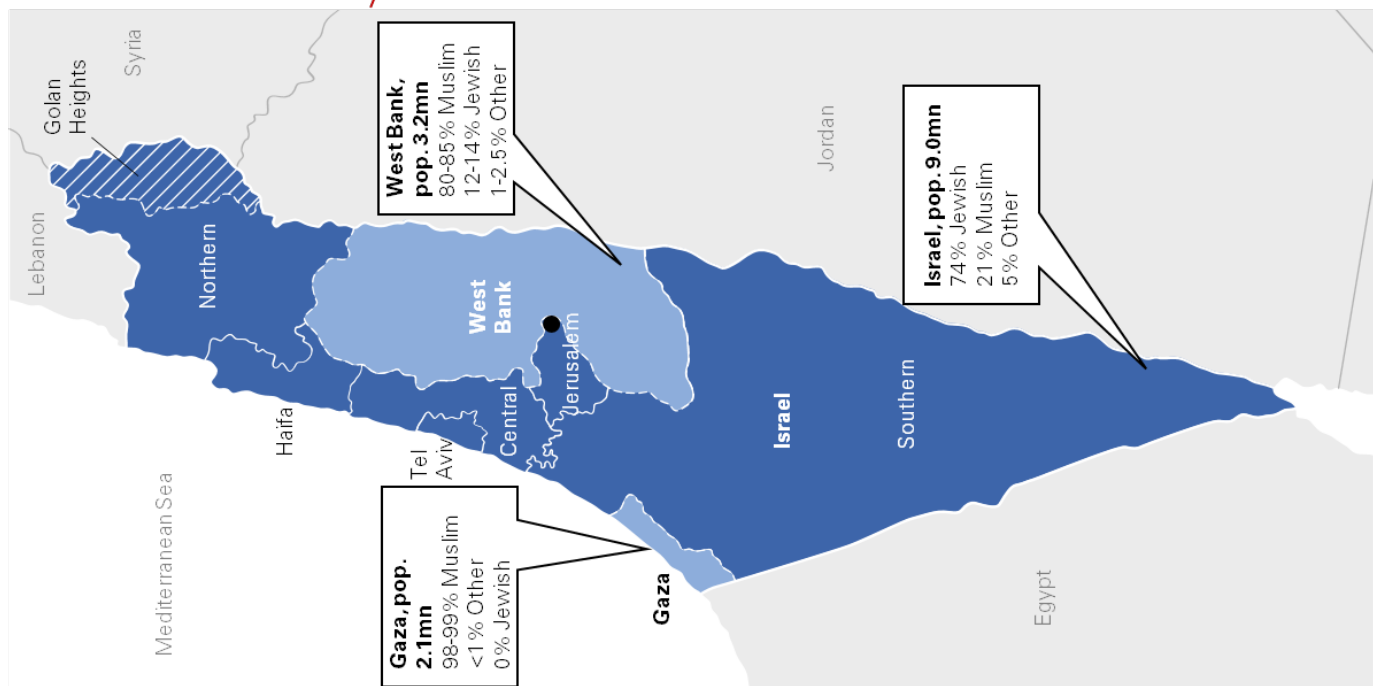
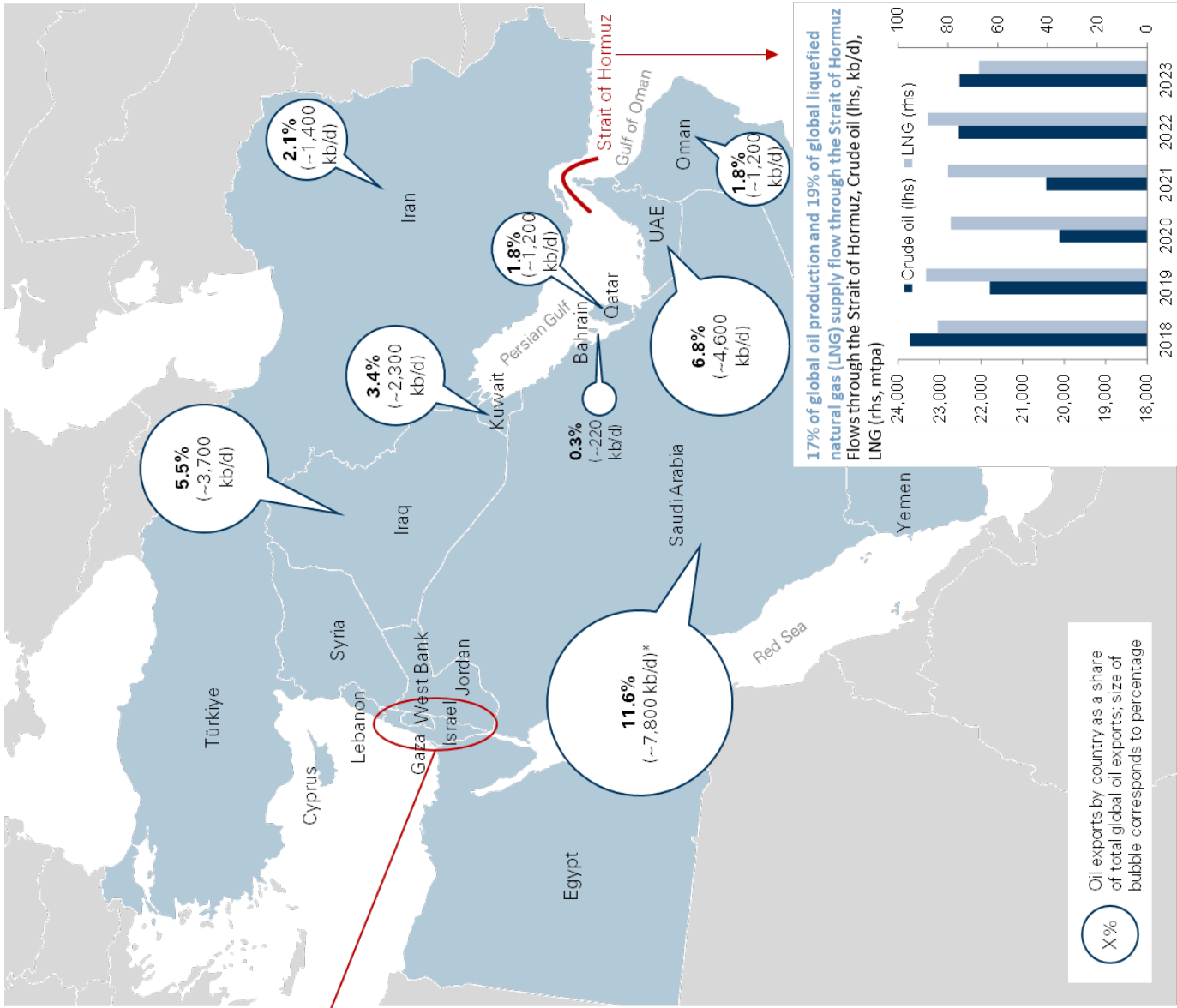
Geopolitical Risk Index, 2019=100



Note: The index from 1985 on counts the number of articles in 11 US, UK, and Canadian newspapers mentioning phrases related to geopolitical tensions. The index from 1900 on performs the same analysis using the archives of three newspapers, the New York Times, the Wall Street Journal, and the Financial Times. The choice of newspapers for both indices imply a measure of geopolitical risk as covered by the Anglo-Saxon press. See [here](#) for more information.

Source: [Dario Caldara & Matteo Iacoviello](#), Federal Reserve Board, Goldman Sachs GIR.

Mapping out a conflict



Note: In 2019, the US became the only country (besides Israel) to officially recognize the Golan Heights as being under the sovereignty of Israel. Outside of that, it is internationally recognized as a Syrian territory. Population figures are 2023 estimates from the CIA's World Factbook. *Minority of Saudi Arabia oil exports flow through the Red Sea. Source: CIA's World Factbook, Getty Images, Kpler, Goldman Sachs GFR. Special thanks to GS Commodity Strategists Callum Bruce and Daniel Moreno for the chart.

Commodities: supply shocks & hedges

Daan Struyven assesses the impact of a potential escalation of the conflict in the Middle East on energy prices

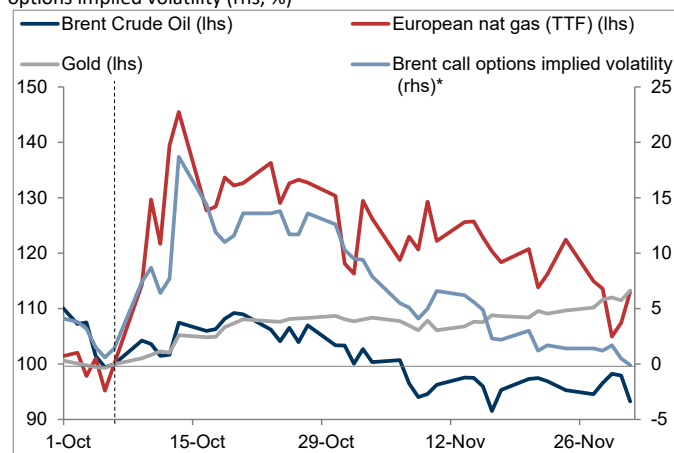
While the geopolitical risk premium in oil markets has declined recently, the ongoing conflict in the Middle East could still pose risk to energy flows if it escalates. Accordingly, we estimate the impact of potential escalation scenarios on energy prices and conclude that the hedging benefits of energy, as well as gold, against negative supply shocks further underscore the case for investing in commodities into 2024.

Despite a reduction in the geopolitical risk premium...

While oil and gas prices initially surged in the wake of Hamas' October 7 attacks on Israel, the ongoing conflict is currently not affecting the supply of oil or natural gas. Indeed, after only a brief shutdown, the Tamar natural gas field in Israel restarted in mid-November, though natural gas exports from Egypt remain below seasonal norms. The lack of supply disruptions helps explain why the geopolitical risk premium has retraced recently, as implied by the decline in both oil prices and the implied volatility of options protecting against large oil price spikes.

The geopolitical risk premium priced into oil prices and options has declined

Brent oil, gold, and European natural gas prices (lhs, Oct. 6 = 100), Brent call options implied volatility (rhs, %)



*5 Delta out of the money minus 50 delta at the money.
Source: Bloomberg, Goldman Sachs GIR.

...large potential price risks remain...

That said, given the physical nature of energy markets, an escalation of the conflict that disrupts global energy supplies could spark a sizable and immediate rally in energy prices. Accordingly, we estimate the fundamental effects on energy prices in two scenarios relative to our baseline that assumes no additional supply disruptions, which sees Brent oil prices at \$86/bbl and TTF natural gas prices at €42/MWh in 1Q24.

First, a scenario in which increased Western scrutiny of Iranian oil exports reduces 2024 Iran oil supply by 750kb/d to 2.5mb/d and shutdowns of Israeli gas fields reduce global liquified natural gas (LNG) supply by 4%, which would raise our 1Q24 Brent oil price forecast by \$5/bbl to \$91/bbl and our December 2024 Brent forecast by \$10/bbl to \$103/bbl. In this scenario, we estimate that TTF natural gas prices in 1Q24 could rise as much as 125% above our baseline forecast, reaching €100/MWh.

Second, while it seems highly unlikely, we estimate that a severe supply downside scenario that interrupts trade through the Strait of Hormuz—through which 17% of global oil production and 19% of global LNG supply currently flow—would lead oil prices to increase by 20% above our baseline forecast in the first month of interruption and could cause prices to temporarily double in the even less likely scenario of an extended disruption. In this scenario, TTF prices would likely rise sharply to the €120-200/MWh range. And uncertainty about the duration of the shock could lead prices to temporarily overshoot these fundamentals-based estimates.

Large upside oil price effects, and especially natural gas price effects, in a severe supply downside scenario

	Effects of supply scenarios on 1Q24 energy prices (% increase relative to baseline)	
	Supply downside	Severe supply downside
Brent crude oil	5%	20% in first month of interruption; more extreme price effects if longer disruption and inventories fall to critically low levels
European natural gas	Up to 125%	190-370%

Source: Bloomberg, Goldman Sachs GIR.

...with European natural gas more vulnerable

These estimates reflect the reality that the still-fragile European natural gas market in the wake of the loss of Russian supply last year is more vulnerable to supply disruptions than the oil market. Indeed, given that lost Russian supply has not been fully replaced and the possibility that last winter's demand adjustment may not persist, the European gas market remains particularly sensitive to tightening shocks—including from supply disruptions, a colder winter, and a reduction in energy conservation efforts. On the other hand, under our assessment of the likely OPEC response, Brent prices are likely to remain in or close to our \$80-\$100/bbl range in most risk scenarios unless OPEC becomes much less assertive (downside price risk) or is prevented from deploying its spare capacity (upside price risk).

The case for commodities in 2024

Given the upside risks to energy prices from geopolitical and winter weather shocks, and the inherent difficulty of anticipating geopolitical shocks, we see value in hedging against such negative supply shocks for both oil and European natural gas.

The hedging benefits of energy, as well as gold, against geopolitical supply disruptions further contribute to the cyclical and structural reasons we recommend going long commodities in 2024. The cyclical case for commodities is that a fading monetary policy drag and reduced industrial destocking should support demand and somewhat raise spot commodity prices. The structural case is that OPEC carry, refinery tightness, and strong green metals demand should support commodity returns in 2024 and beyond.

Daan Struyven, Head of Oil Research

Email: daan.struyven@gs.com
Tel: 212-357-4172

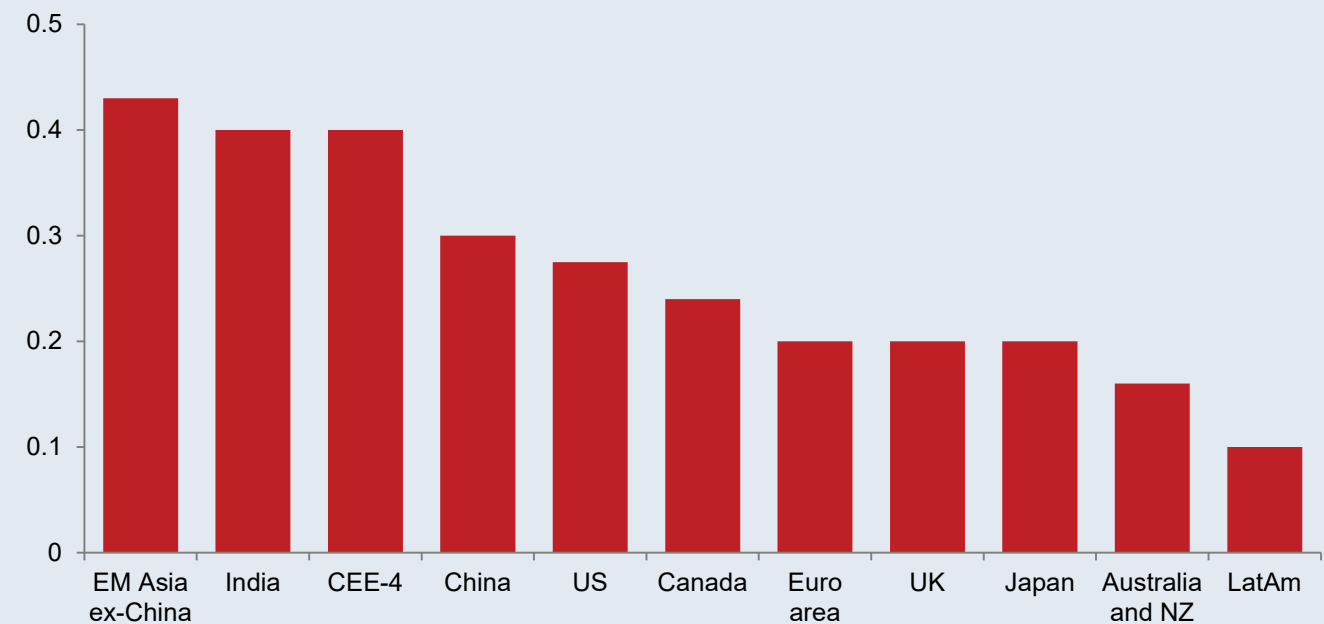
Goldman Sachs & Co. LLC

Oil shocks and their economic impacts

GS GIR economists estimate the impact a \$10/bbl rise in Brent crude oil prices would have on inflation and GDP growth across major economies and regions. Their key findings are below.

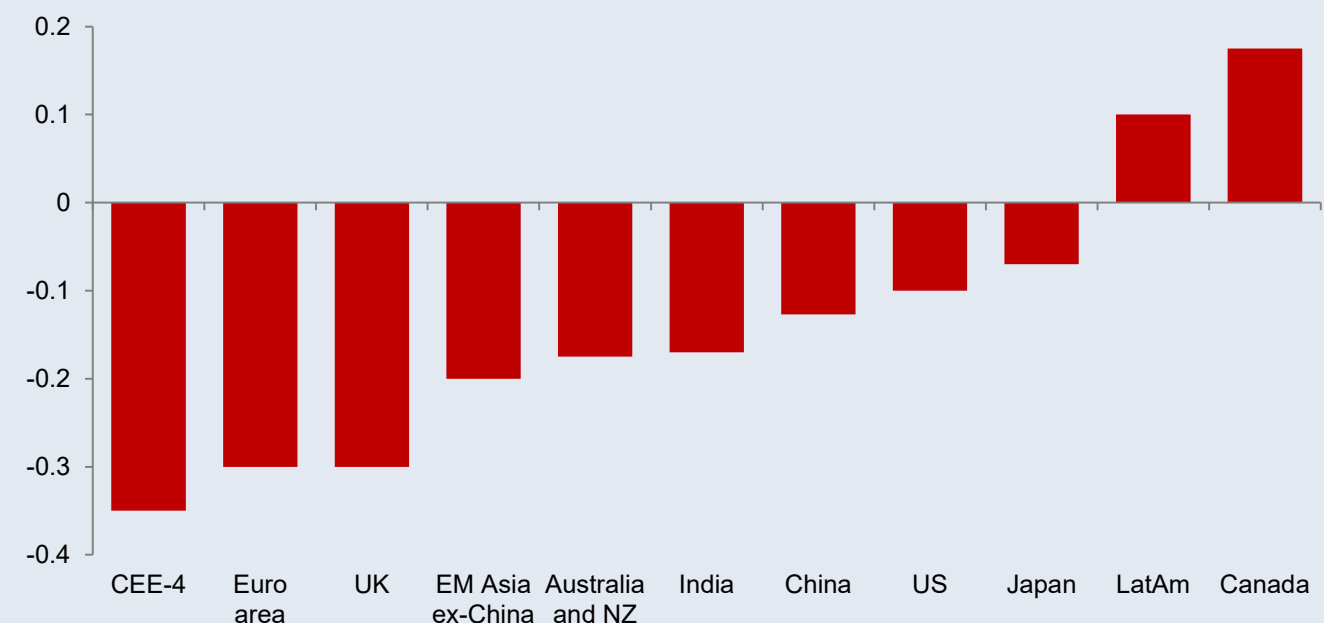
A \$10/bbl increase in oil prices would have moderate impacts on inflation, with generally larger impacts across EMs than DMs...

Effect of a \$10/bbl increase in Brent oil prices on headline inflation, pp



...as well as modest negative impacts on growth, though net oil exporters such as Canada and some Latin American economies would see a positive impact

Effect of a \$10/bbl increase in Brent oil prices on GDP, %



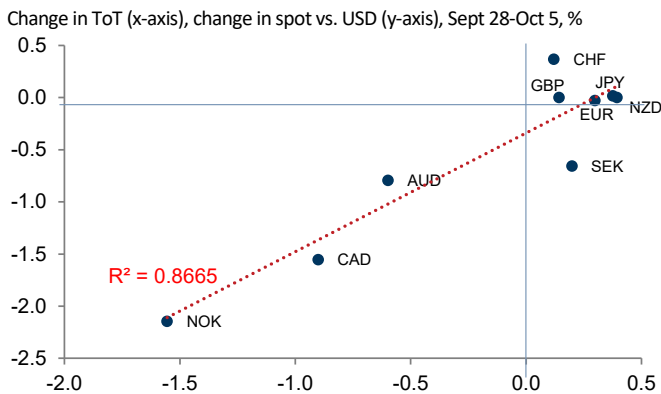
Notes and source: Figures and methodology originally published in Joseph Briggs and Devesh Kodnani's "Global Economics Analyst: The Boost to Global Growth and Inflation from China's Reopening", February 2, 2023. Impacts on China inflation and GDP come from Jonathan Sequeira's "Potential Impact of Tighter Oil Supply on Emerging Asia", February 23, 2022.

FX in a geopolitical energy shock

Karen Fishman and Lexi Kanter find that NOK, MYR, and AUD could see the biggest gains, and SGD, KRW, CZK, and EUR the greatest losses, if energy prices were to spike sharply as a result of the Middle East conflict

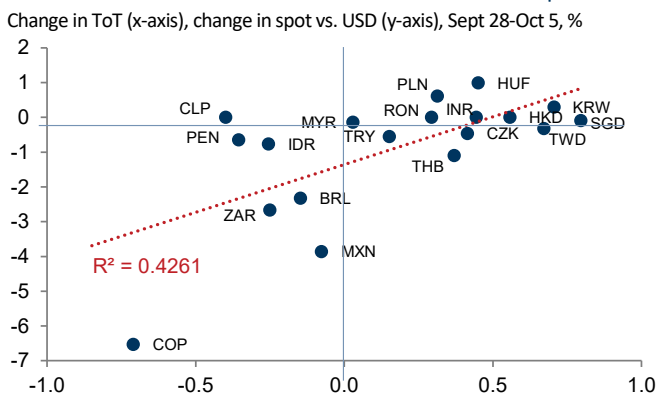
The ongoing Israel-Hamas war and the possibility of a broader escalation have raised questions around the implications for FX. Commodity price shocks (and their effect on the current account) are a key channel through which geopolitical conflict can impact FX. Indeed, changes in the prices of an economy's commodity exports relative to its imports—known as an economy's commodity terms of trade (ToT)—can drive a sizable portion of FX returns during times of significant commodity price shifts. For example, between September 28 and October 5, when Brent prices sold off by 11%, ToT shifts explained nearly 90% of G10 FX returns and over 40% of EM FX returns.¹

Terms of trade shifts explained nearly 90% of G10 FX returns...



Source: Bloomberg, Goldman Sachs GIR.

...and over 40% of EM FX returns over a brief recent period

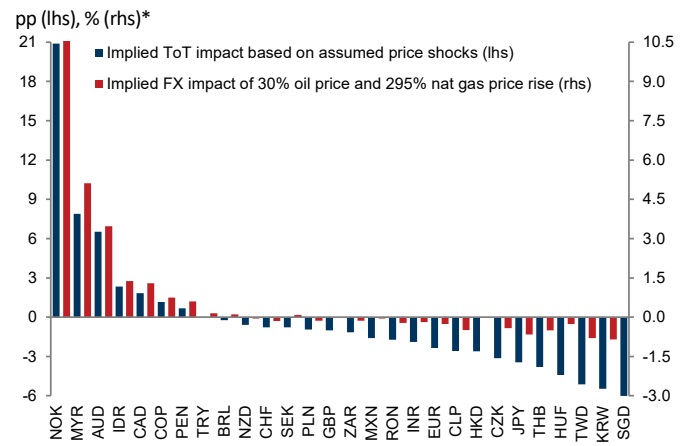


Source: Bloomberg, Goldman Sachs GIR.

We can therefore use our ToT framework to assess the potential impact on FX markets of a possible further escalation of the Middle East conflict that sees commodity supply disruptions. Our commodity strategists have outlined a severe supply downside scenario that could cause oil prices to rise by 20% or more and natural gas prices by anywhere from 190-370% above our baseline forecasts (see pg. 18). In such a scenario, our framework implies that NOK, MYR, and AUD

would be among the biggest outperformers, while other Asian and European currencies, such as those of net energy importers like SGD, KRW, CZK, and EUR, would be among the most vulnerable.

NOK, MYR, AUD among the biggest outperformers, and SGD, KRW, CZK, EUR among the most vulnerable, in a severe scenario



*lhs scaled by commodity trade share % of GDP; rhs based on GS ToT analysis. Source: Goldman Sachs GIR.

Similar beneficiaries & vulnerabilities using a rule-of-thumb

Our rule-of-thumb that roughly half of changes in export prices pass through to FX versus only around 20% of changes in import prices provides more specific estimates of potential currency returns. This approach yields similar results: NOK, MYR, and AUD would see the biggest gains, while other Asian and European currencies would see the greatest losses, in a severe downside scenario. That said, a couple of caveats are worth noting. First, our rule-of-thumb is based on the average relationship across G10 and EM FX, so the estimated impact is likely to be overstated for some currencies and understated for others. Second, the FX returns for commodity importers are usually fairly small due to the limited estimated pass-through.²

Geopolitical escalation would also benefit CHF and USD

Overall, our analysis suggests that markets pricing in a more severe geopolitical escalation scenario would pose upside risk to our forecasts for NOK, MYR, and AUD as well as downside risk to our forecasts for KRW, EUR, and CEE currencies. That said, CHF should see the greatest safe-haven inflows—consistent with prior periods of rising geopolitical risk—making it an ideal hedge for most portfolios (see pgs. 14-15). The broad Dollar should also face some additional upside pressure, particularly if Fed expectations were to reprice higher in response to renewed supply-driven inflation concerns. In other words, elevated geopolitical concerns represent just one more reason why we believe the balance of risks still skews toward more persistent Dollar strength in 2024.

Karen Reichgott Fishman, Senior FX Strategist

Email: karen.fishman@gs.com Goldman Sachs & Co. LLC
Tel: 212-855-6006

Lexi Kanter, FX Strategist

Email: alexandra.kanter@gs.com Goldman Sachs & Co. LLC
Tel: 212-855-9701

¹ We exclude ARS, NGN, PHP, and CNY, as they are currencies that have been more managed. We also exclude ILS, RUB, and UAH given the conflict in the economies.
² See "FX Comment: FX Implications of Geopolitical Risk Through Our Terms of Trade Indices" (Nov 1, 2023) for a similar exercise that instead uses the observed betas for each USD-cross over the same sample period. We place greater weight on the results based on our rule-of-thumb than those yielded by this exercise.

Snapshot of our regional asset views

What are the implications of the current conflict in the Middle East for regional assets?

FX

Teresa Alves and Victor Engel

- **ILS.** While the Israeli Shekel depreciated sharply in the wake of Hamas' attacks on Israel, it has since retraced and is now stronger than it was prior to the attacks. This sharp appreciation reflects recent support from the Bank of Israel—including a \$45bn intervention program—as well as Israel's healthy underlying balance-of-payments position, which reduces the economy's vulnerability to shocks (see pg. 11). Additionally, the potential for financial inflows from abroad (from aid and other financial transfers) could put further appreciation pressure on the Shekel. That said, the Shekel is still over 5% weaker YTD and significantly undervalued relative to our estimates of fair value. Nevertheless, underlying fundamentals remain solid, with a strong current account and a smaller spike in inflation than elsewhere. So, while uncertainty remains particularly elevated and a longer conflict that more broadly impacts these fundamentals could spark renewed depreciation, in a less severe outcome, we see room for the Shekel to appreciate in 2024.
- **EGP.** While the official USD/EGP exchange rate has remained unchanged at around 30.9 since the start of the war, the parallel market exchange rate has weakened significantly, and forward market pricing implies that the official rate will depreciate shortly after Egypt's elections later this month. This, in part, likely reflects concerns about the conflict's potential spillovers to Egypt's external balances, particularly for tourism. However, we think this pricing is premature as authorities likely prefer a stable official rate for now given a sizable FX backlog.
- **SAR.** Similarly, the Saudi Riyal peg at 3.75 against the US Dollar, as well as market pricing of the future USD/SAR exchange rate, haven't changed since the beginning of the conflict. This is likely due to strong fundamentals, with oil prices remaining rangebound since the war started, and significant FX reserves. More broadly, Saudi Arabia's growth has become less oil-dependent. The country now has one of the highest expected non-oil growth rates in the region and the SAR has recently exhibited reduced sensitivity to oil price changes. We therefore don't see the peg coming under pressure in the near term.

Credit

Sara Grut

- **Israel.** Israeli credit spreads have widened significantly since the start of the conflict. 5-year CDS spreads widened from around 60bp to an initial peak of 145bp and currently sit around 115bp. This is over two times higher than spreads in similarly rated peers as the market demands a higher premium on Israeli credit amid the ongoing conflict. Notably, this widening is significantly larger than that seen during previous episodes of geopolitical conflict in the region. Indeed, during the 2014 Israel-Gaza conflict, Israel's credit spreads widened only by roughly 20bp at the peak. The magnitude of the recent move largely reflects the severity of the current conflict as well as concerns around Israel's growth and longer-term debt dynamics, though technicals may have also weighed on spread performance with Israel recently issuing more than \$4bn worth of new bonds. Accordingly, Moody's, S&P, and Fitch all recently placed Israel's credit rating on negative outlook.
- **Gulf Cooperation Council (GCC).** Conversely, the overall spread widening has been relatively small across the GCC. GCC spreads initially widened by ~10-30bp but have since tightened back to pre-war levels. This modest relative spread widening is roughly in line with historical episodes of heightened geopolitical tensions and reflects the region's strong fundamentals—sizable FX reserves limit the risk of a credit event—and limited spillovers to the rest of the region so far.
- **Egypt and Jordan.** Spreads initially experienced a significant widening in Egypt and Jordan given their proximity to the war, but that has since retraced. Neither of these sovereigns have as strong credit fundamentals as GCC economies, so their spread resilience likely reflects an expectation of increased international support should the war have material spillovers to Egypt's or Jordan's economy, both of which are heavily reliant on tourism revenues.

Equities

Caesar Maasry

- **Israel.** The Israeli equity market has moved in line with the Shekel, with an initial 15% drop in MSCI Israel through late October followed by a subsequent 14% recovery rally. Since the start of October, MSCI Israel has underperformed MSCI World ex-USA by 2.5pp, a fairly insignificant amount given that MSCI Israel trades with a volatility of 28pp annualized.
- **MENA.** MENA equities have been quite insulated relative to the global volatility of the past month. The region typically trades as a defensive EM, particularly during periods of an appreciating US Dollar and rising interest rates. MENA equities initially underperformed at the onset of the conflict (MENA equities down 3% vs. MSCI EM flat in the first half of October), but have recovered strongly over the past five weeks (MENA equities up 6%). This has been driven by broader risk appetite as the USD has depreciated 2% and US 10-year rates have rallied 15bp. In short, there has not been an apparent risk premium shock to regional equities in aggregate.
- **Egypt.** MSCI Egypt has performed exceptionally well (on a USD basis using official exchange rates), rising 21% in USD terms since the start of October. This market is somewhat unique in the region given its limited direct exposure to oil prices and close relationship with local interest rates. Relative to current real rates, Egyptian P/E multiples look broadly fair, and we forecast 12% EPS growth to drive the market higher from here in 2024. From a valuation perspective, however, there doesn't seem to be significant risk premium embedded at current levels.

Interview with Avi Hasson

Avi Hasson is CEO of Start-Up Nation Central, a non-profit organization that aims to strengthen Israel's innovation ecosystem and connect Israeli innovation to the world. He previously served as Chief Scientist at Israel's Ministry of Economy and Industry and as Founding Chairman of the Israel Innovation Authority. Below, he discusses the importance of the tech sector for Israel's economy and how the sector has fared amid the ongoing Israel-Hamas war.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.



Jenny Grimberg: How important of a role does the tech sector play in Israel's economy?

Avi Hasson: The importance of the tech sector to Israel's economy is second to that of no other country. High-tech accounts for around 18% of Israel's GDP, double the percentage of the US and three times that of the

European Union. Around 14% of Israel's workforce is employed in high-tech—the highest in the world. 30% of Israeli income taxes are paid by high-tech employees, and the sector accounts for around 50% of the country's exports. The productivity of Israel's high-tech sector substantially outperforms high-tech sectors in its OECD peers, while most other sectors in the Israeli economy frankly lag them. Basically, the business plan of Israel is high-tech, which has led the country to outgrow many comparable economies over the past few decades.

Jenny Grimberg: How did Israel become a global technology and innovation hub?

Avi Hasson: It was truly a journey—I sometimes joke that it took Israel 30 years to become an instant success. Leading scientific and research universities like Technion and Hebrew University and the agricultural technology-focused Volcani Institute have existed for over a century, some Israeli defense companies have been around for several decades, and multinationals started putting down roots in Israel as early as 1949. But the turning point for Israel's tech sector occurred in the mid-1980s.

Until then, Israel had a centralized, government-based economy, focused on feeding, housing, and defending the population of the still-young nation. 70% of the economy was owned by the government. But, the country basically went bankrupt, and the government undertook a series of major economic reforms to liberalize the economy and increase its reliance on markets. Legislation during that time, nicknamed the R&D Law, defined the mission of the government entity formerly known as the Office of the Chief Scientist, now called the Israel Innovation Authority: to foster innovation in Israel. That helped kick off the transformation of Israel from a problem-solving nation—in which the prowess of the innovation ecosystem was used to solve the country's basic challenges—to a startup nation that harnessed that ecosystem to develop technologies for others and then commercialize those technologies and build businesses. Today, Israel is home to over 100 unicorn, category-leading, and scaled-up companies, thanks to an innovation ecosystem made possible by a wealth of human and financial capital.

Jenny Grimberg: How is a small country like Israel able to develop and attract the human and financial capital needed to make such an ecosystem possible?

Avi Hasson: It's true that Israel is a very small country, roughly the size of New Jersey. But, to quote what OpenAI's CEO Sam Altman said recently when asked why he thinks Israel could become a global leader in AI innovation and technology, Israel has high "talent density". That talent has many dimensions, including scientists, engineers, and entrepreneurs. And unlike Silicon Valley, where tech talent comes from around the world, all of the talent in Israel is either homegrown or Jewish immigrants. Local talent has always been the main source of our human capital, primarily the result of a strong education system. But Jewish immigrants that studied in the US and returned to Israel to grow their businesses have also played a key role. Intel's Dov Fruman, Microsoft's Moshe Lichtman, and General Motors' Gil Golan are a few examples. So, the first component of the innovation ecosystem—talent—always existed in Israel, as did a culture of "chutzpah"—a boldness and scrappiness when it comes to business and beyond.

But the second component—financial capital and expertise—only came later. Almost no venture capital existed in the country before 1992. And so, these talented people with great ideas had little knowledge of how to go to market, or had no access to the funds to get there. That changed in 1993 when a government program known as Yozma, Hebrew for "initiative", created the Israeli venture capital industry, giving rise to a dozen venture firms. Today, the government is long gone from the venture capital market and plays only a limited role in R&D. Israel invests 6% of its GDP in R&D annually—the highest share of GDP in the world—but only one-tenth of that comes from the Israeli government. But government policies and programs were instrumental in engaging the private sector, resulting in an ecosystem of startups, venture capital investors, multinationals, accelerators, universities, and everything else required to transform an idea into a company. So, this public-private partnership laid the foundation for Israel to become a global hub of innovation.

“Government policies and programs were instrumental in engaging the private sector, resulting in an ecosystem of startups, venture capital investors, multinationals, accelerators, universities, and everything else required to transform an idea into a company.”

Jenny Grimberg: How has the ongoing Israel-Hamas conflict impacted the Israeli tech industry so far?

Avi Hasson: The war has impacted virtually every sector of Israel's economy given that an estimated 15% of Israel's workforce has been drafted for active duty, which also affects the family members of those workers. And it has added to the funding challenges that startups in Israel and around the world, especially early-stage startups, were already facing as investors pursue less risky investments amid the higher interest rate environment.

That said, Israel's tech sector has shown remarkable resilience so far. The management teams of global companies headquartered in Israel have wasted no time in shifting internal resources to ensure business continuity and timely product delivery. And the roughly 450 multinational companies that have innovation and R&D centers in Israel have done the same, supporting their workers, providing everything their local sites need to continue operating, and utilizing their global capabilities to shift resources to ensure minimal customer impact. Companies have been able to successfully adapt by drawing on lessons learned during the pandemic and the war in Ukraine—roughly 20k Ukrainians worked for Israeli tech companies before Russia invaded Ukraine—which taught them how to operate remotely and manage employees working in war zones.

“The war has impacted virtually every sector of Israel's economy... That said, Israel's tech sector has shown remarkable resilience so far.”

Jenny Grimberg: What accounts for the tech sector's resiliency amid the current conflict?

Avi Hasson: Four main factors are working in the tech sector's favor. One, the demand for tech, unlike, say, tourism, hasn't been hurt by the conflict. Global customers are still consuming tech products and services made in Israel, and they'll likely continue to do so as long as firms continue delivering. Two, the vast majority of the Israeli tech sector is software-based, so the supply chain and logistical issues that inevitably result from war haven't affected it.

Three, most Israeli tech firms aren't located in the north or south of the country, but rather around the Tel Aviv metropolitan area, which, thanks to the Iron Dome, is not a war zone. And four, the devaluation of the Shekel relative to the Dollar, while not necessarily a positive for the country, has benefited high-tech companies, because both their revenues and funds raised are denominated in dollars while most of their expenses are denominated in shekels. And the high-tech workforce has not just mobilized to ensure the continued resiliency of their companies, but is also putting their knowledge to use to address broader national needs like gathering information about the hostages held in Gaza, monitoring cybersecurity threats, and building software solutions to manage health systems.

Jenny Grimberg: What—if anything—is being done to address the funding challenge for startups?

Avi Hasson: Several vehicles have been created, most of which Start-Up Nation Central is involved in assisting, to supply emergency bridge funding to young startups to ensure that they can survive the war. While these are venture funds, they've been structured without management fees or carried interest. The Israel Innovation Authority has also launched a \$100mn fast-track grant fund for startups with limited runway. And those funds are matched given the way the Authority works, so that \$100mn will probably generate around \$200mn of total private and public money.

Jenny Grimberg: Are you seeing any evidence of companies pulling back from Israel as a result of the conflict?

Avi Hasson: Not at this time. The CEOs of the biggest tech firms have expressed support for Israel through their public statements and have stood by those statements so far. And Israel has become strategic for many businesses, so reducing the reliance on it would be complicated and challenging. People may not realize it, but they are using Israeli technology every day, whether it be through their iPhones, computers, cars, etc.

“The Israeli tech sector has endured and even prospered through previous conflicts... [which] keeps us optimistic in these very trying times that the Israeli tech sector's future remains bright.”

Jenny Grimberg: How concerned are you, though, that a prolonged conflict could change that?

Avi Hasson: A lot will depend on how the war unfolds. Companies have shifted to a “routine in crisis” mode to ensure that they can continue to operate, and, as I mentioned, several initiatives have been launched to extend startups' runways. But a prolonged conflict will undoubtedly make it more difficult to continue running and managing a company. Large companies with steady cash flows will likely find it easier to manage so long as they continue to deliver, while younger and smaller companies will likely find it more difficult, which is why both the government plans and emergency funds are focused on that tier of companies.

That said, the Israeli tech sector has endured and even prospered through previous conflicts. [We have found](#) that many companies that raised funds during the 2006 Lebanon War and 2014 Operation Protective Edge have gone on to become global leaders in their field and achieved more significant financial milestones—such as acquisitions, IPOs, and unicorn status—compared to other periods. Companies founded during those conflicts also had higher success rates than those established in other periods. That the tech ecosystem came out stronger after such events keeps us optimistic in these very trying times that the Israeli tech sector's future remains bright.

Glossary of key terms

People, parties, and groups

Israel Defense Forces (IDF): Established in 1948 just after Israel's independence, the IDF is Israel's national military. It is made up of three services branches: ground forces, navy, and air force. Israeli citizens over the age of 18 are expected to serve in the military for at least two years and remain in the reserves until their 50s. The IDF has roughly 170,000 active troops and 465,000 trained reservists.

Hamas: Formed in 1987, Hamas is a Palestinian Islamist militant group and political party that controls the Gaza Strip, which it seized control of from the Fatah-controlled Palestinian National Authority in 2007. Led by **Ismail Haniyeh** (political wing), Hamas does not recognize Israel's right to exist and seeks to create an Islamic Palestinian state in Israel's place. Hamas has received support in the form of weapons, money, and training from Iran. The group has been designated as a terrorist organization by many countries including the US, European Union, Israel, Japan, and UK.

Palestinian Islamic Jihad (PIJ): The PIJ is an Islamist militant group in Gaza. It emerged in the 1980s as a rival to Hamas, and like Hamas, it receives support from Iran. The PIJ also seeks the establishment of an Islamic state but has not received as much support from Palestinians as Hamas has. The group has been designated as a terrorist organization by several countries including the US, UK, and Israel.

Palestine Liberation Organization (PLO): Established in 1964, the PLO is a Palestinian nationalist coalition that is internationally recognized as the official representative of the Palestinian people. The PLO runs the Palestinian National Authority. Headquartered in the West Bank and led by **Mahmoud Abbas**, the PLO has acknowledged Israel's right to exist and has advocated for a two-state solution. In response to the ongoing conflict, Abbas has criticized Israel's actions but has also said that no other organization besides the PLO represents the Palestinian people.

Palestinian National Authority (PNA): The Fatah-controlled government body of the Palestinian regions created under the 1993 Oslo Accords signed between Israel and the PLO. It was created to provide Palestinians with limited self-rule in Gaza and parts of the West Bank. Today, it retains partial control over the West Bank. The US has previously invested in boosting PNA governance and security capacities.

Fatah: A national Palestinian political party that is the dominant party of the PLO which runs the PNA and governs the West Bank. **Mahmoud Abbas** leads the Fatah party.

Hizbullah (or Hezbollah): An Iran-backed Shia Islamist militant group and political party in Lebanon. It is considered Iran's closest and most capable proxy, and is an ally of Hamas. Established in the 1980s and led by **Hassan Nasrallah**, Hizbullah has accumulated a large arsenal of weapons that includes over 100,000 rockets and missiles. The group has been designated as a terrorist organization by several countries, including the US and Israel.

Houthis: An Islamist political and militant group in Yemen backed by Iran. It makes up an important arm of Iran's so-called "Axis of Resistance." Houthis' leader, **Abdul-Malik al Houthi**, has called for support for Hamas and other armed Palestinian groups.

Axis of Resistance: An informal anti-Israel and anti-West military alliance built by Iran. It includes Islamist groups and governments in Yemen, Syria, Lebanon, Gaza, and Iraq.

Places

Strait of Hormuz: A strait between the Persian Gulf and the Gulf of Oman. It is the only sea passage from the Persian Gulf to the open ocean and is one of the world's most strategically important chokepoints because of the large volumes of oil that flow through the strait (see pg. 17).

Rafah Crossing: The only crossing point between Egypt and Gaza, and the only viable route into/out of Gaza since Israel closed its crossings. It remains partially open to allow some Palestinians into Egypt and a small number of aid trucks into Gaza.

Other important terms

Iron Dome: Israel's missile defense system, designed to intercept and destroy short-ranged rockets, missiles, and artillery.

Intifada: An Arabic word that directly translates to "shaking off" and means uprising or rebellion. It is commonly used to refer to two Palestinian uprisings against Israel. The first intifada began in 1987 and ended in 1993 with the signing of the Oslo Accords. The second intifada began in 2000 and ended in 2005 (see pgs. 8-9).

Nakba: An Arabic word that means catastrophe. Palestinians use it to refer to the displacement of Palestinians during the 1948 Arab-Israeli war.

Two-state solution: The basis of the Oslo Accords, the two-state solution is a vision for a lasting peace between the State of Israel and the Palestinian people whereby each recognizes the right of the other to exist as a sovereign nation. Implementation of the two-state solution remains elusive largely due to, among other things, disagreements over territorial demarcation of the Palestinian state, the status of settlements, and the status of Jerusalem, which both Israel and the Palestinians claim as their capital.

Note: This does not constitute an exhaustive list of all terms relevant to the current conflict in the Middle East.

Source: Britannica, Congressional Research Service, Wilson Center, Council on Foreign Relations, Goldman Sachs GIR.

Summary of our key forecasts

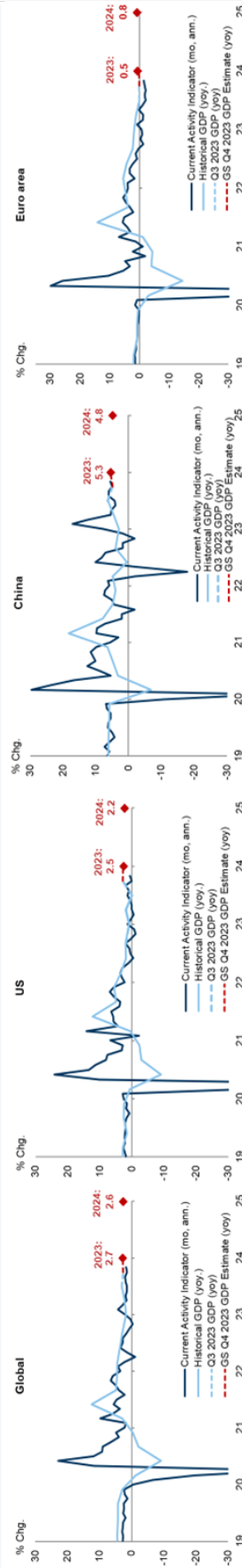
GS GIR: Macro at a glance

Watching

- **Globally**, we expect real GDP growth of 2.6% yoy in 2024 reflecting tailwinds from strong real household income growth, a smaller drag from monetary and fiscal tightening, a recovery in manufacturing activity, and an increased willingness of central banks to deliver insurance cuts if necessary. We expect global core inflation to fall back to 2-2.5% by the end of 2024 as core goods inflation continues to decline, shelter inflation falls further, and the supply-demand balance in the labor market continues to improve.
- **In the US**, we expect real GDP growth of 1.8% in 2024 on a Q4/Q4 basis, reflecting a reduced drag from monetary and fiscal tightening and strong real disposable income growth. We continue to see a below-consensus 15% probability of entering a recession over the next 12 months. We expect core PCE inflation to decline to 2.4% by Dec 2024, reflecting disinflation from the advanced stage of rebalancing in the labor, housing rental, and car markets. We expect the unemployment rate to decline to 3.7% in 2024 and remain there for the next few years.
- **We believe the Fed's** hiking cycle is complete and that the Fed will remain on hold at the current Fed funds rate range of 5.25-5.5% into 2024. We expect the first rate cut to only come in 4Q24 and to proceed at a pace of 25bp/quarter, with the Fed funds rate range likely ultimately stabilizing at 3.5-3.75%, a higher equilibrium rate than last cycle. On balance sheet policy, we expect the Fed to slow the pace of balance sheet runoff in 4Q24 and to finish runoff in 1Q25.
- **In the Euro area**, following a period of stagnation in 2H23, we expect real GDP growth to increase to 0.8% yoy in 2024 reflecting a pickup in real disposable income, a fading credit drag as the ECB remains on hold, and an improvement in manufacturing activity, which should more than offset the building headwind from fiscal policy. We expect core inflation to slow further to 2% yoy by December 2024, reflecting continued declines in services inflation and normalizing wage growth.
- **We believe the ECB's** hiking cycle is complete and that the ECB will remain on hold at 4.00% until the first rate cut in 2Q24, after which we expect rate cuts to proceed at a 25bp/quarter pace until the policy rate reaches 2.5%, though a faster-than-expected slowdown in inflation or lack of a growth improvement next year could prompt earlier rate cuts. On balance sheet policy, we expect the ECB to limit PEPP reinvestments in 2Q24 to EUR 10bn/month, before stopping all reinvestments from 3Q24.
- **In China**, we expect real GDP growth to slow to 4.8% yoy in 2024 as China continues to face several growth headwinds, including a prolonged property downturn, though we expect a material offset from a step up in policy easing and pick up in investment growth. We expect policy easing to be front-loaded and growth momentum to be stronger in the first half of 2024. Over the longer term, we maintain our cautious view on China's growth outlook given deteriorating demographics, property and local government deleveraging, and global supply chain de-risking.
- **WATCH WAR IN THE MIDDLE EAST AND DETERIORATING DM PUBLIC DEBT PROFILE.** A potential escalation of the war in the Middle East that interrupts trade through the Strait of Hormuz could lead to significant increases in energy prices that would likely lower global growth, on net. The deteriorating public debt profile in DMs is a growing concern, though we think markets will remain patient unless next year's US elections bring the possibility of fresh unfunded fiscal expansion.

Goldman Sachs Global Investment Research.

Growth



Source: Haver Analytics and Goldman Sachs Global Investment Research. Note: GS CAI is a measure of current growth. For more information on the methodology of the CAI please see "Improving Our Within-Month CAI Forecasts." Global Economics Comment, Mar. 06, 2023.

Forecasts

Economics	GDP growth (%)				Interest rates 10YR (%)		FX		Commodities		Equities									
	2023	2024		2023	2024	Last	E 2023	E 2024	Last	3m	12m	S&P 500	E 2024	E 2023	12m	YTD	E 2023	PIE		
Global	2.8	2.7	2.9	2.6	2.7	4.28	4.75	4.55	EUR/US	1.08	1.04	1.10	Price	4,500	--	S&P500	3	18.9	21.1x	
US	2.8	2.5	2.4	2.2	1.2	2.34	2.75	2.25	GBP/US	1.26	1.18	1.25	EPS	\$224	\$221	IXX4PJ	9	-0.6	14.5x	
China	5.6	5.3	5.2	4.8	4.5	0.69	1.00	1.30	\$/JPY	147	155	150	Growth	1%	0%	TPIX	12	24.9	16.3x	
Euro area	0.2	0.5	0.5	0.8	0.6	4.08	4.40	4.00	\$/CNY	7.10	7.30	7.15				STOXX 600	3	9.9	13.2x	
Policy rates (%)	2023		2024		Credit (bp)		Commodities		Last		4Q23		1Q24		Consumer		2023		2024	
	GS	Mkt	GS	Mkt	Last	3m	Last	IG	USD	IG	105	121	119	US	Unemp. Rate	CPI (% yoy)	Q1	Q2	Q3	Q4
US	5.38	4.56	5.13	3.81	78	86	94	Crude Oil, Brent (\$/bbl)	78	86	105	121	119	US	3.7	2.7	5.1	5.0	4.4	--
Euro area	4.00	3.11	3.25	2.47	2.69	2.85	3.75	Nat Gas (\$/mmBtu)	2.69	2.85	367	385	380	Euro area	6.6	2.2	--	--	--	--
China	1.70	1.73	1.80	1.88	8,963	8,400	10,000	Copper (\$/mt)	8,963	8,400	157	166	163	China	--	1.3	--	--	--	--
Japan	-0.10	0.16	-0.10	0.32	2,049	2,050	2,050	Gold (\$/roy oz)	2,049	2,050	431	460	455	Japan	--	--	--	--	--	--

Source: Bloomberg, Goldman Sachs Global Investment Research. For important disclosures, see the Disclosure Appendix or go to www.gs.com/research/hedge.html. Market pricing as of December 4, 2023.

Glossary of GS proprietary indices

Current Activity Indicator (CAI)

GS CAIs measure the growth signal in a broad range of weekly and monthly indicators, offering an alternative to Gross Domestic Product (GDP). GDP is an imperfect guide to current activity: In most countries, it is only available quarterly and is released with a substantial delay, and its initial estimates are often heavily revised. GDP also ignores important measures of real activity, such as employment and the purchasing managers' indexes (PMIs). All of these problems reduce the effectiveness of GDP for investment and policy decisions. Our CAIs aim to address GDP's shortcomings and provide a timelier read on the pace of growth.

For more, see our CAI page and Global Economics Analyst: Trackin' All Over the World – Our New Global CAI, 25 February 2017.

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For more, see our GSDEER page, Global Economics Paper No. 227: Finding Fair Value in EM FX, 26 January 2016, and Global Markets Analyst: A Look at Valuation Across G10 FX, 29 June 2017.

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GS FCIs gauge the "looseness" or "tightness" of financial conditions across the world's major economies, incorporating variables that directly affect spending on domestically produced goods and services. FCIs can provide valuable information about the economic growth outlook and the direct and indirect effects of monetary policy on real economic activity.

FCIs for the G10 economies are calculated as a weighted average of a policy rate, a long-term risk-free bond yield, a corporate credit spread, an equity price variable, and a trade-weighted exchange rate; the Euro area FCI also includes a sovereign credit spread. The weights mirror the effects of the financial variables on real GDP growth in our models over a one-year horizon. FCIs for emerging markets are calculated as a weighted average of a short-term interest rate, a long-term swap rate, a CDS spread, an equity price variable, a trade-weighted exchange rate, and—in economies with large foreign-currency-denominated debt stocks—a debt-weighted exchange rate index.

For more, see our FCI page, Global Economics Analyst: Our New G10 Financial Conditions Indices, 20 April 2017, and Global Economics Analyst: Tracking EM Financial Conditions – Our New FCIs, 6 October 2017.

Goldman Sachs Analyst Index (GSAI)

The US GSAI is based on a monthly survey of GS equity analysts to obtain their assessments of business conditions in the industries they follow. The results provide timely "bottom-up" information about US economic activity to supplement and cross-check our analysis of "top-down" data. Based on analysts' responses, we create a diffusion index for economic activity comparable to the ISM's indexes for activity in the manufacturing and nonmanufacturing sectors.

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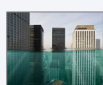
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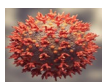
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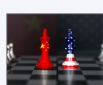
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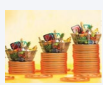
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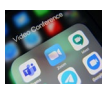
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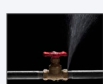
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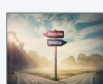
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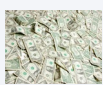
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