Note: The following is a redacted version of the original report published March 13, 2025 [31 pgs].

Goldman Sachs Research

ISSUE 137 | March 13, 2025 | 5:40 PM EDT

TOP of MIND

EUROPE'S SHIFTING SECURITY LANDSCAPE

Increased hopes of an end to the war in Ukraine and a dramatic shift in Europe's defense policy have led to rising optimism around European growth and strong outperformance of European assets. But with a quick end to the war increasingly in doubt and the rise in European defense spending likely to take a while at best, what this all really means for growth, markets, and the security landscape in Europe and beyond is Top of Mind. We ask Russia watcher Thomas Graham if a quick, enduring end to the war is probable (No), and former NATO Assistant Secretary General for Defense Investment Camille Grand if the recent shift in European defense policy represents a sea change (Yes). We conclude that higher defense spending should eventually boost European growth, and argue that European equities have further to run, but that risks around the Euro and Bunds are more two-sided, especially given tariff risks. Finally, former MI6 Chief Sir Alex Younger discusses implications for the geopolitical landscape in Europe and beyond.

"People who think this Russia-Ukraine conflict will be quickly resolved and just put to the side, never to be thought of again, are simply deluding themselves.

- Thomas Graham

The reality is that the primary driver of this sea change in European defense is not the behavior of Donald Trump, but the behavior of Vladimir Putin, who remains unthwarted and might even become further emboldened if the conflict in Ukraine ends in his favor.

- Camille Grand

Fundamentally, the world is shifting from a unipolar to a multipolar world… At the same time, this dissipation of power has undermined the legitimacy of democratic governments, resulting in a more ideologically contested and chaotic world.

- Sir Alex Younger"

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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

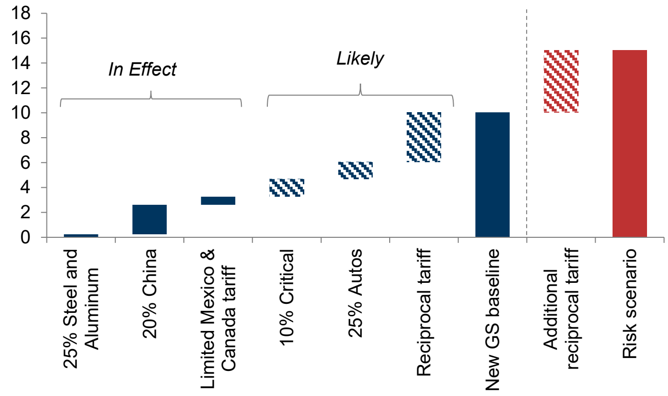
- We now assume a 10pp increase in the US effective tariff rate (vs. 4-5pp prior) as reciprocal tariffs and further increases in product-specific tariffs now seem likely.
- We raised our Dec 2025 core PCE inflation forecast to ~3% (from 2.5%, yoy), lowered our 2025 GDP growth forecast to 1.7% (from 2.4%, Q4/Q4)—our first below-consensus call in 2.5 years—and slightly raised our end-2025 unemployment rate forecast to 4.2% (from 4.1%) and our 12m recession odds to 20% (from 15%) to reflect our new tariff base case.

Datapoints/trends we're focused on

- Fed cuts; we still expect two in 2025 and one more in 2026.

A much more adverse tariff base case

Impact of tariff increases on the effective tariff rate, pp



Source: Goldman Sachs GIR.

Japan

Latest GS proprietary datapoints/major changes in views

- No major changes in views.

Datapoints/trends we're focused on

- BoJ policy; we expect the BoJ to continue hiking rates at a pace of two hikes per year, with the next hike in July.
- *Shunto* spring wage negotiations; we expect a *shunto* base pay rise of least in the low 3% range for this year, with risks skewed to the upside given strong wage requests.
- Japanese consumer sentiment, which softened for a third consecutive month in February.
- Japan's industrial production, which fell for a third consecutive month in January.

A strong spring wage negotiation season

Shunto wage hike requests and actual base pay rise, % change yoy

Source: JTUC-RENGO, Keidanren, Goldman Sachs GIR.

Europe

Latest GS proprietary datapoints/major changes in views

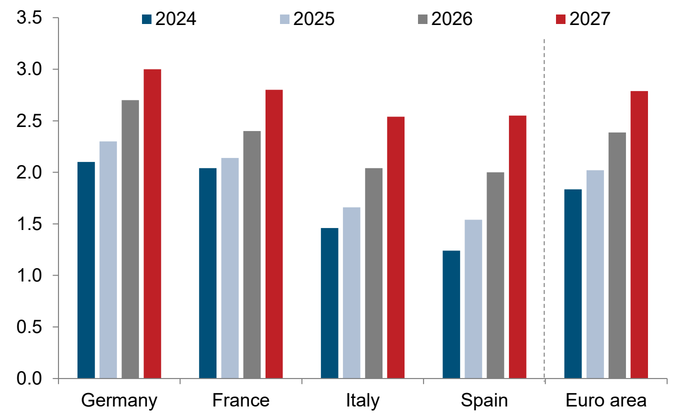
- We recently raised our 2025/2026/2027 Euro area real GDP forecasts to 0.8%/1.3%/1.6% (from 0.7%/1.1%/1.3%) and, in turn, our ECB terminal rate forecast to 2% in Jun (from 1.75% in Jul) to reflect the higher European defense spending we expect over the next few years.

Datapoints/trends we're focused on

- Germany's substantial fiscal package, which we expect to pass, though it is far from a done deal given political hurdles.
- Potential Russia-Ukraine ceasefire, which we think would result in a modest Euro area GDP boost (+0.2%), unless it entails a comprehensive resolution to the conflict (+0.5%).

A European defense renaissance likely ahead

GS forecasts of military spending, % of GDP



Source: NATO, Goldman Sachs GIR.

Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

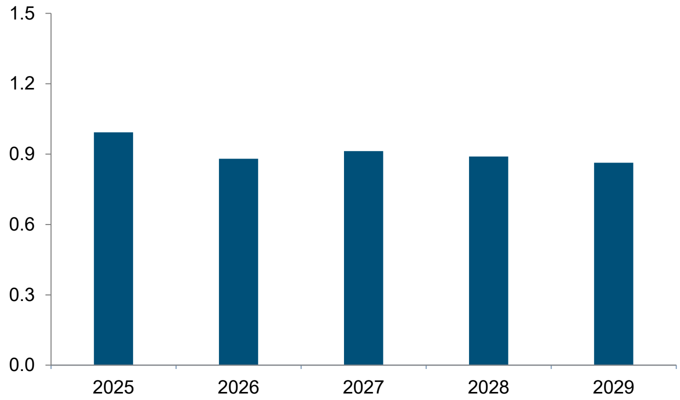
- No major changes in views.

Datapoints/trends we're focused on

- China growth; we expect high-tech manufacturing to continue playing an important role in supporting China's growth ahead.
- China CPI inflation, which fell sharply in February, though this mainly owed to distortions related to the earlier-than-usual Lunar New Year holiday.
- India's cyclical growth slowdown, the worst of which we think is now over, but we expect an only-gradual recovery.
- CEEMEA growth, which would benefit from a potential resolution to the Russia-Ukraine conflict.

China: a growth boost from high-tech manufacturing

Est. annual real GDP contribution from high-tech manufacturing, pp



Source: NBS, CEIC, Goldman Sachs GIR.

Europe's shifting security landscape

Increased hopes of a potential end to the war in Ukraine and a dramatic shift in Europe's approach to defense as the Trump Administration attempts to turn the post-Cold War security landscape on its head have led to rising optimism around Europe's growth outlook as well as meaningful outperformance of European assets so far this year. But with a quick resolution to the war increasingly in doubt, and the rise in European defense spending likely to take a while at best and possibly underdeliver altogether at worst, what these developments really mean for growth, markets, and the security landscape in Europe and beyond is Top of Mind.

We first speak with Sir Alex Younger, former Chief of Britain's MI6, and Thomas Graham, former Special Assistant to the President and Senior Director for Russia on the NSC staff, about what to make of the recent developments in the Russia-Ukraine war. While the recent progress toward a ceasefire is undoubtedly welcome news, both Younger and Graham are not optimistic about achieving an enduring resolution to the war quickly given the complexity of the situation (see pgs. 8-9 for a visual look at how complex the conflict is and pg. 10 for each side's take on it and a potential peace deal). Indeed, Graham thinks any resolution is more likely to evolve over several stages and many years and believes that people who expect a quick and tidy resolution are "simply deluding themselves." And both he and Younger warn that Russia's strategic interests and ambitions extend well beyond the current conflict.

While resolution of the conflict may be further away and take longer than initially hoped, GS senior CEEMEA economists Clemens Grafe and Andrew Matheny provide a peek at what the post-war economies of Russia and Ukraine, respectively, could look like, with Russia likely facing lower growth and inflation as well as a weaker currency, and Ukraine's future likely to be characterized by economic "renewal" rather than reconstruction.

But for the European economy, the biggest impact of an end to the war would likely come through the energy channel given the multi-year energy crisis that ensued from the cessation of Russian natural gas flows—with European natural gas prices today still double pre-war levels. GS Co-head of Global Commodities Research Samantha Dart estimates that the return of Russian natural gas supplies would push prices lower, and potentially sharply so if flows returned in full, though such a restoration seems unlikely in the near term given political and infrastructure challenges.

Such a decline in natural gas prices would undoubtedly be good news for the European economy. But the larger shift potentially afoot is what some are calling a "sea change" in European defense policy after decades of underinvestment (see pg. 14) amid US policy shifts that could transform the post-Cold War global order.

We turn to Camille Grand, who formerly served as Assistant Secretary General for Defense Investment at NATO, to better understand the gaps in Europe's military capabilities today and what it would take to close them. He argues that beyond deficiencies in the mass and readiness of armed forces, Europe is severely lacking in the "strategic enabler" capabilities that are vital to modern warfare. However, while Grand admits that the "EU is particularly good at making large announcements that, when unpacked, aren't so drastic after all"—and the recent ReArm EU initiative is no exception—he is optimistic that a real and lasting change, rather than just a "cosmetic shift", is under way in European defense policy and spending to address these gaps, which he believes neither economic nor political obstacles are unlikely to derail. And for this, he gives more credit to Putin's behavior than to Trump's.

GS senior European economist Filippo Taddei then details the road to a rise in European defense spending, which he agrees will likely end in a momentous shift in EU defense policy, but expects to be long, windy, and not without its bumps after what looks to be a promising start in the upcoming EU Council.

So, what do all of these developments add up to for the European growth outlook? While Jari Stehn, GS Chief European Economist, explains that the boost from greater European defense spending will likely be quite small this year, he recently moderately raised his Euro area growth forecasts to 1.3% and 1.6% in 2026 and 2027, respectively, to reflect his expectation that defense spending in key Euro area countries will rise from the current 2% of GDP to close to 3% by 2027. And a ceasefire in Ukraine would see greater growth upside of as much as 0.5% should a comprehensive and credible peace agreement be achieved, which Graham argues will crucially depend on the commitments all sides are prepared to make.

But the key question for investors is whether these shifts can extend the recent striking outperformance of European assets (see pg. 17). For equities, we believe the answer is yes given the still-large valuation gap between US and European stocks. But we think the risks are more two-sided for the Euro and Bunds following the recent moves, especially as tariff risks continue to loom large for Europe and beyond.

Finally, we explore what these developments could mean for the global security and geopolitical landscape, which Younger describes as transitioning from a US-led unipolar rules- and institutions-based order to a multipolar strongman- and deals-based order. The implications of this shift could be profound, not only for Europe but also for the world at large.

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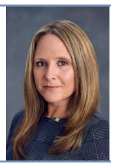


Interview with Sir Alex Younger

Sir Alex Younger is former Chief of Britain's Secret Intelligence Service, MI6 (2014-20). Below, he argues that the current shift toward a multipolar world entails a strongman approach to international relations, which will have important implications for the global security landscape.

The interviewee is an advisor to Goldman Sachs, and the views stated herein reflect those of the interviewee, not Goldman Sachs.

Allison Nathan: How would you describe the broad geopolitical landscape that the recent developments in the Russia-Ukraine conflict are taking place within?

Sir Alex Younger: Fundamentally, the world is shifting from a unipolar to a multipolar world. What we thought of as "the end of history" and the triumph of democracy was really just a function of unipolar US power and the US' willingness to set up and police globalization and the global rules-based system, which the world, and Europe in particular, became very accustomed to. But now, while the US remains the prodigious power, its ability and willingness to maintain its role as the policeman of the global order it created has significantly diminished. When the US set up this system in 1945, it was 40% of the global economy, and now it's 19%. Power has shifted eastward and allowed the rise of competing economic and value systems. It's now impossible for the US to make the price in all places. At the same time, this dissipation of power has undermined the legitimacy of democratic governments, resulting in a more ideologically contested and chaotic world. So, what's happening in the world today isn't all about Donald Trump.

Allison Nathan: But Trump does seem to be forcefully asserting himself into foreign conflicts. How does that square with a diminishing US role in the world?

Sir Alex Younger: The principal characteristic of this multipolar world is the transition from a rules and institutions-based order to a power, strongman, and deals-based order. And the experience I've gleaned from my many decades in the spy/hard security world tells me that this strongman-based world sadly is the natural state of the world. I call it the "Yalta" world, because of the image of the Big Three powers sitting in a row at the Yalta Conference at the end of WWII carving up the world based on spheres of influence and the principle that might is right. This Yalta world is Trump's world. By character and experience, he is instinctively comfortable operating in it.

Allison Nathan: How might a return to such a world order impact the potential resolution of the Russia-Ukraine war?

Sir Alex Younger: In the context of a world order driven by spheres of influence, Trump seems to agree with Putin's view that large states have additional rights over small states and especially over their backyard. Putin has always been clear that his interest in Ukraine is not just about territory but about the unacceptability of a sovereign Ukraine on Russia's border.

I think Trump honestly believed he could end the conflict on his first day. But because Zelensky cannot compromise on sovereignty issues, even if he can be pushed into giving up land, the issue will be far more complex than Trump expected. More made for television oval office moments are a distinct possibility.

Allison Nathan: But, given the asymmetries between Russia and Ukraine, wasn't that also the case pre-Trump?

Sir Alex Younger: Yes, the prior approach could have been characterized as allowing Ukraine to lose slowly. And I don't argue with Trump's instinct to end the war. However, Trump has substantially more power over the situation than he realizes. Putin's only plan has been to wait for Trump to be reelected. And Putin cannot sustain his war effort indefinitely. So, Trump could use his power to drive a much harder bargain with Russia. I very much hope that he comes around to this approach.

Allison Nathan: What effect could Trump's actions here have on the future of NATO?

Sir Alex Younger: I sympathize with Trump's concern about freeriding by Europe and believe his focus on this issue has done us all a favor. But I emphatically disagree with his view that the US has not benefitted from the alliance system it created. My experience has provided me with a deep understanding of autocratic actors in Moscow and Beijing, and I can confidently say that what makes them happiest is the denigration of alliances, which democracies do well, and which autocracies cannot match. What does China want for Christmas? For Europe and the US to be split and for that to lead to the erosion of NATO and other alliances, which China explicitly describes as illicit groupings designed to contain it. Given Trump's stance, NATO's future is undoubtedly a concern, but this issue was coming at us anyway. Crucially, its resolution is as much Europe's responsibility as the US'.

Allison Nathan: Where does Europe sit within the strongman-based order you described?

Sir Alex Younger: Europe is in a really uncomfortable position. It really convinced itself that history had ended. This led to two unfortunate outcomes. The first was an irresponsible drawdown of Europe's military and industrial capabilities, which has left it unable to defend itself today. The second was a sense that countries could optimize commercial and economic policy regardless of the risks of becoming dependent on countries that may not share their values. Germany is the epitome of this; it famously took American security, Russian gas, and Chinese markets to benefit its people. I long feared this would not end well given the insight garnered from the spy world that our opponents never got the memo about the triumph of democracy. So, I've been waiting to see what might wake Europe up. They have now received a powerful message from a combination of Putin's aggression, Mario Draghi's report on the steps Europe needs to take to restore its competitiveness and Trump's transactionalism.

Have these events shocked Europe sufficiently to act? Maybe. Germany's recent decision to throw away the fiscal orthodoxy of the last three decades and sharply increase defense and infrastructure spending was a step in this direction; Europe doesn't change unless Germany does, so this is huge. But, as Angela Merkel noted, Europe is 6% of the world's population, 25% of its GDP, and 50% of its social spending. A renaissance in Europe's hard power, not only military capability but also cutting-edge technologies, means this has to change. So, Europe has a long way to go, but recent moves have exceeded my expectations. And, contrary to Europe's traditional mindset, I think the US-European relationship would be healthier if Europe succeeds in establishing its own hard power.

Allison Nathan: How long might it take for Europe to develop the hard power it needs?

Sir Alex Younger: The time required for the Russian military to regenerate to the point that it could potentially threaten the sovereignty of other Eastern European countries—which is what Putin is ultimately seeking to accomplish—suggests that Europe may have around five years to get its act together. It could take closer to a decade for Europe to do so in the median scenario. So, now would be a good time to start.

Allison Nathan: More broadly, how might the events in Russia-Ukraine impact the global balance of power?

Sir Alex Younger: The idea of an axis of autocracy is overstated in some ways, but a significant degree of mutual interest undoubtedly exists between Russia, North Korea, Iran and China. I have some sympathy for Pete Hegseth's argument that resolving the Ukraine conflict will leave the US more room to focus on China. But the assertion that an end to the conflict in Russia's favor will allow the US to split Russia from China is fanciful. Autocratic regimes are strategically invested in the West's weakness. That is powerful.

Allison Nathan: What might the evolving dynamics in the Russia-Ukraine conflict mean for Mainland China's territorial ambitions, especially vis-à-vis Taiwan?

Sir Alex Younger: My view has been that the risk of Mainland China resorting to use force against Taiwan in the short- to medium-term is not as high as often thought, as China is facing major economic challenges and its current plan for regaining Taiwan, which entails slow harassment and isolation and normalization of China's claim over the island, seems to be working well and is lower risk. But much will now depend on how Trump pursues his plan to do a deal with China. So far, China is playing hard to get. But as a strongman himself, I suspect Xi will eventually be attracted by the idea of a great power conversation. If so, he would have two clear agenda items: Taiwan and technology controls. It is hard to see how the US could avoid linking Taiwan to other issues in such talks, which is exactly what China wants, and could risk emboldening China on that front.

And perhaps the bigger problem is that what America wants from Xi—a reordering of the mercantilist trade and economic policy that the US rightly believes has distorted the global economy— is not a thing that Xi can deliver; such policy is intrinsic to the Communist Party's continuing dominance. So, a productive negotiation between Trump and Xi will be challenging.

Allison Nathan: Have recent developments increased the North Korean threat?

Sir Alex Younger: North Korea is very worrying because not only does it have nuclear weapons, but also a new friend in Russia. Until recently, isolation has constrained it. But thanks to North Korea's support of Russia in Ukraine—without which Russia would not still be in the fight—North Korea is now in a military capability alliance of equals with Russia. This explains why Kim Jong Un became much more aggressive toward South Korea a year ago, repudiating the core goal of reunification and instead designating the South as North Korea's main enemy. This is scary, especially given the long land border between the two with delegated authority to military forces on both sides, which makes the situation edgy and dangerous and raises the risk of an accident. The one saving grace is that China is not happy about the Russian-North Korean alliance, which should keep the situation from veering out of control. But there is little doubt that this alliance has emboldened North Korea.

Allison Nathan: What about Iran?

Sir Alex Younger: Iran similarly moved from a place of international isolation to a proper peer-to-peer military relationship with Russia. But what's surprised me and others the most about Iran is how weak it is, militarily, economically, and politically. Trump clearly has animus against Iran, and a strong consensus exists among Republicans to apply maximum pressure to it. But maximum pressure is really all about clamping down on China's willingness to import Iranian oil, and its effectiveness will depend on Trump's willingness to impose secondary sanctions on China, which will be interesting to watch because Trump is sensitive to oil price spikes. I don't think Trump will be willing to write a check for a war in Iran.

Allison Nathan: What risks aren't being discussed enough?

Sir Alex Younger: An underappreciated risk is that the US' withdrawal of its various security guarantees could lead to the widespread proliferation of nuclear weapons among a range of states, who could conclude that possessing these weapons will be the only way to guarantee their security. Some people argue that such a shift would mean the end of wars, but that's naïve.

Another concern is that even as we enter a multipolar world characterized by increasingly divergent ideologies, the tech revolution is leading to hyper connection, which will drive risks that are often hidden. The quality of the malware from Chinese cyber actors detected on US telecom and government networks is an example. While the focus may be on wars and strongman wheeling and dealing among the major powers, it turns out our critical infrastructure is already fundamentally compromised. And that worries me very much.

Interview with Thomas Graham

Thomas Graham served as Special Assistant to the President and Senior Director for Russia on the National Security Council staff during the George W. Bush Administration. He is a Distinguished Fellow at the Council on Foreign Relations. Below, he argues that an enduring resolution to the Russia-Ukraine war will likely take many years and a series of agreements.

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

Jenny Grimberg: The Russia-Ukraine conflict has seen numerous developments since President Trump fired the opening salvo on a potential resolution. What do each of Russia/President Putin and Ukraine/President Zelensky ultimately want?

Thomas Graham: Put simply, Ukraine's interest is its existence. Ukrainian leadership and the vast majority of the population want the preservation of a sovereign Ukraine that gradually integrates itself into the European community. For Russia, the conflict is embedded in its desire to revise what it views as an unfavorable post-Cold War settlement to create space for Russia to play a major role in Europe and, more importantly, on the global stage. With respect to Ukraine itself, Putin has laid out maximalist demands that include no NATO membership and Ukraine's recognition that the four provinces Russia annexed in 2023 are indeed Russian territory along with its demilitarization and "denazification", which is code for the installation of a pro-Russian puppet regime. Putin also wants all Western sanctions on Russia lifted and the war's so-called root causes—which include Ukraine's pursuit of what Russia perceives as anti-Russian policies and the structure of Europe's security architecture—dealt with in any settlement. So, Ukraine and Russia have two radically different sets of interests.

Jenny Grimberg: Where do each side's red lines lie in terms of what they won't accept in a settlement?

Thomas Graham: Russia's stated red lines are no NATO membership for Ukraine, no foreign troops on Ukrainian territory, and no development of Ukraine's nuclear capacity, though the real red line is probably NATO membership, which is simply intolerable from Russia's standpoint. Ukraine's red line is probably anything that would compel it to formally recognize Russia's annexation of any part of its territory, including Crimea. Now, the Ukrainians likely understand that any ceasefire line would run through their territory and that Russia would continue controlling any territory it currently holds. But Ukraine wouldn't formally recognize that, and would always hold out the hope that it could eventually regain that territory through non-military means, much as the Germans never recognized the post-WWII division of their country and always held out hopes of reunification, which ultimately occured decades later.

Jenny Grimberg: What could each side actually agree to as a compromise?

Thomas Graham: That won't become clear until both sides come to the negotiating table. As much as the Trump Administration wants a swift settlement of the conflict, everything is still happening on the battlefield, with Russia and Ukraine each trying to strengthen their positions on the ground to gain more leverage in any future negotiation. That said, it's well understood that Ukraine is currently in a relatively weak position. Ukraine is the smaller country, 20% of its territory has been occupied, a substantial share of the population has been displaced internally, millions have fled the country, and it's dependent on continued Western support. But even if Russia is in a stronger position, it too is facing major challenges in the form of economic difficulties, manpower shortages due to horrific losses at the front, and high mobilization costs. So, both Russia and Ukraine are effectively losing, but Ukraine is losing faster.

Jenny Grimberg: Much has been made of the Trump Administration's involvement in the conflict. But to what extent is that involvement actually making a difference?

Thomas Graham: Trump's involvement has focused people's attention on a potential settlement in a way that wasn't the case even a few months ago. That said, Trump's desires don't align with Russia's or Ukraine's—he clearly wants a quick settlement, which neither side has an interest in. The Ukrainians have insisted they need security guarantees before they will agree to a settlement, as they justifiably want assurances that they will be protected against renewed Russian aggression. The Russians, as we've discussed, want a settlement that deals with the conflict's so-called root causes. Both sides are now engaging with the Trump Administration given that Ukraine depends significantly on the US and the Kremlin likely senses an opportunity with Trump to advance Russia's interests. But the fact of the matter is that Russia and Ukraine have yet to start negotiating with each other. Until they do, it's very difficult to envision how this conflict will be settled.

> "Trump's involvement has focused people's attention on a potential settlement in a way that wasn't the case even a few months ago. That said, Trump's desires don't align with Russia's or Ukraine's—he clearly wants a quick settlement, which neither side has an interest in."

Jenny Grimberg: European leaders have been discussing providing Ukraine with such security guarantees. How optimistic/pessimistic are you that Europe will ultimately be able to do so, and how quickly?

Thomas Graham: This conflict is not only about Ukraine but also about the broader question of European security, so Europe clearly must be engaged. And, indeed, the Trump

Administration's actions have motivated the Europeans to devise their own peace plan that includes security guarantees. But, while nobody doubts that Europe has the resources to enable it to play a significant role in the continent's security arrangements, the key question is whether it has the political will to do so. Forging a consensus among the 27 EU member states and the UK has never been easy; even the eight European heads of state who convened at last month's emergency summit in Paris couldn't come to an agreement on sending troops to Ukraine. Whether that changes, or a consensus can be forged among even the major military and diplomatic players, is an open question. While the recent developments out of Germany—the proposal to eliminate the debt barrier to increased military spending and incoming Chancellor Friedrich Merz's strong statement that Europe needs to develop its own security capacities—are positive steps forward, we shouldn't underestimate the political obstacles to progress or exaggerate how rapidly the realities of European defense will change.

Jenny Grimberg: So, you believe that the Russia-Ukraine conflict won't be resolved quickly?

Thomas Graham: I believe a settlement in the near term is unlikely. Both sides must first come to the negotiating table. The Trump Administration has been leaning heavily on the Ukrainians over the past few weeks to that end, but even if the Ukrainians become willing to negotiate with the Russians, the Russians must also agree to negotiate with the Ukrainians. And once both sides are at the table, negotiators will need to find where—if anywhere—the two sides have common ground and where they may be able to apply leverage to make one side accept a condition it otherwise wouldn't. So, this process will be more difficult than the Trump Administration had hoped for.

One could imagine a temporary ceasefire at some point, and indeed Ukraine recently agreed to a US proposal for a 30-day ceasefire, though Russia so far has not. But a temporary ceasefire is not a resolution. I am very skeptical that an enduring settlement will be reached this year. 2026/2027 becomes more possible as the pressure grows on both sides to end the conflict. In all likelihood, a resolution will evolve over many years. And it won't come in the form of a single document, but rather through a series of agreements that deal with various aspects of the conflict and European security. Lowering tensions during the Cold War took many agreements over decades, and that will almost certainly be the case here as well. So, I believe people who think this Russia-Ukraine conflict will be quickly resolved and just put to the side, never to be thought of again, are simply deluding themselves.

> "I believe people who think this Russia-Ukraine conflict will be quickly resolved and just put to the side, never to be thought of again, are simply deluding themselves."

Jenny Grimberg: What could lead you to change that view?

Thomas Graham: Major developments on the battlefield or in US-Russia relations are the critical variables that could change the war's calculus quite rapidly. If, contrary to expectations, a major breakthrough occurs on the front lines in Russia's favor, Ukraine would likely become more willing to negotiate, or may even come close to capitulation. Now, that probably wouldn't be a good outcome for the Ukrainians or Europe more broadly, but it would bring an end to the conflict. There has also been talk about normalizing relations between the US and Russia and setting up working groups to deal with a broad range of issues, including not only the Ukraine conflict and European security but also the Middle East, strategic stability, etc. If real progress is made on these fronts, that would suggest that the character of the US-Russia relationship is changing in a way that could create an opening for a relatively quick ceasefire that may endure for some time while other, more challenging aspects of the conflict continue to be negotiated.

Jenny Grimberg: The 1994 Budapest Memorandum and the 2014/15 Minsk Agreements didn't hold up. What's to guarantee that any settlement to this conflict won't ultimately meet the same fate?

Thomas Graham: That's the key question, and exactly why the Ukrainians are seeking robust security guarantees. Whether any resolution will endure ultimately depends on the quality of the agreement and the commitments everyone is prepared to make to ensure that it does, not just Russia and Ukraine but also individual European countries and the community as a whole. So again, this is why I have consistently cautioned against the idea that a quick solution will be found to this incredibly complex conflict.

> "Even if the Russia-Ukraine conflict were miraculously settled in the next few months, the Russia-West relationship will almost certainly continue to be characterized by rivalry and competition for years to come."

Jenny Grimberg: Beyond an underestimation of how long a lasting resolution might take, what—if anything—do you believe is being misunderstood/underappreciated about this situation?

Thomas Graham: People in the West are focused on the Russia-Ukraine war. But this war is just one part of a broader problem between Russia and the West. Relations between the two have been strained for some time, even before the current conflict began. How to manage relations over the longer term and stabilize the frontier between Russia and the West, which now stretches all the way from the Barents Sea in the Arctic through the Baltic Sea down to the Black Sea, are complex issues that must be grappled with. And those issues are unlikely to go away even if Putin were to disappear from the Russian political scene and a more pragmatic leader took his place, because Russia has fundamental strategic interests that run contrary to those of the US. So, even if the Russia-Ukraine conflict were miraculously settled in the next few months, the Russia-West relationship will almost certainly continue to be characterized by rivalry and competition for years to come.

A long...

1991
- >80% of Ukrainians vote for independence from the USSR in Mar 17 nationwide referendum.
- Russian parliament declares Russian independence from the Soviet Union on Dec 12 by adopting the Belovezh Accords, which had been worked out by the leaders of the republics of Russia, Ukraine and Belarus.

1994
- The US, Russia, and Britain sign the Budapest Memorandum, stating that they will "respect the independence, sovereignty, and the existing borders of Ukraine". In exchange, Ukraine agrees to give up its nuclear weapons.

November 2004
- Orange Revolution begins after reports of widespread vote-rigging in the presidential election won by the Party of Regions candidate Viktor Yanukovych. In **December**, opposition candidate Viktor Yushchenko wins an election runoff.

January 2006
- Russia cuts off all gas supplies passing through Ukrainian territory following a dispute over the price of natural gas and transit costs. Supply is restored a few days later.

January 2009
- Russia again cuts off gas supplies to Ukraine following a pricing dispute. Gas flows are restored three weeks later.

2010
- Viktor Yanukovych wins presidential election; his main rival, Prime Minister Yulia Tymoshenko, is arrested and eventually jailed for abuse of power, an action that Western governments viewed as politically motivated.

2012
- The Nord Stream 1 gas pipeline is completed. It is set to deliver natural gas from Russia to Germany.

November 2013
- Euromaidan protests begin after Yanukovych abandons an agreement to establish closer trade ties with the EU in favor of closer ties with Russia.

February 2014
- Maidan protests escalate following violent suppression by the government, eventually leading Yanukovych to flee Ukraine. Parliament then votes to remove Yanukovych from office.

March 2014
- Russia formally annexes the Crimean peninsula.

April 2014
- The War in Eastern Ukraine begins.

June 2014
- New Ukrainian President Petro Poroshenko signs the Ukraine-EU Association Agreement, describing it as Ukraine's "first but most decisive step" toward EU membership.

July 2014
- A Malaysia Airlines flight (MH17) is shot down by Russian-backed separatists over non-government controlled Ukrainian territory.

September 2014
- The Minsk Protocol is signed in an attempt to end the war in Donbas. It fails to stop fighting in the Donbas, leading to a new package of measures, Minsk II (see Feb 2015).

February 2015
- Poroshenko negotiates a ceasefire with separatist troops in the Donbas region of Ukraine following a summit in Minsk that establishes a protocol for de-escalation that involves a reintegration of Russian-backed separatist regions into Ukraine on terms that would give Russia influence over Ukrainian politics.

March 2015
- Ukrainian Parliament approves a law granting "special status" of local self-governance to Donbas, per the Minsk Protocol.

January 2016
- Ukraine's Deep and Comprehensive Free Trade Area with the EU to modernize its economy, governance, and rule of law in accordance with EU standards and gain access to the European Single Market comes into effect.

March 2017
- Poroshenko halts all trade with the Russian-separatist controlled regions of Donetsk and Luhansk in Eastern Ukraine.

May 2017
- Visa-free travel for Ukrainian citizens to the Schengen Zone goes into effect.

December 2017
- President Trump approves lethal arms sales to Ukraine, going beyond the non-lethal military assistance provided by the Obama Administration.

November 2018
- Russia Federal Security Service coast guard fires upon and captures three Ukrainian navy vessels in the Kerch Strait. The Ukrainian Parliament votes to impose martial law in the country's coastal regions in response.

January 2019
- The leading authority of Orthodox Christianity—the Ecumenical Patriarch of Constantinople—recognizes the independence of the Ukrainian Orthodox Church, thereby formally severing it from the Russian Orthodox Church.

April 2019
- Television comedian Volodymyr Zelensky wins the Ukrainian presidential election.
- Zelensky's party wins a majority of the seats in Parliament two months later.

June 2020
- Ukraine is named a NATO Enhanced Opportunities Partner, granting Ukraine improved access to NATO interoperability programs and exercises.

February 2021
- President Zelensky orders a crackdown on Ukrainian oligarchs, notably the Chairman of pro-Russian political party *Ukrainian Choice* Viktor Medvedchuk, freezing his assets and charging him with treason.

March 2021
- Russian military begins moving large quantities of troops, arms, and equipment into Crimea.
- President Zelensky signs Decree No. 117/2021 approving the "strategy of disoccupation and reintegration of the temporarily occupied territory of the Autonomous Republic of Crimea and the city of Sevastopol".

July 2021
- Putin publishes essay "On the Historical Unity of Russians and Ukrainians."

September 2021
- 80k Russian troops are reported to be stationed at the Ukrainian border.
- Ukraine conducts military exercises with NATO forces, and Russian troops take part in large joint Russia-Belarus military exercises.
- Gazprom completes construction of the Nord Stream 2 pipeline set to deliver natural gas to Germany.

November 2021
- 100k Russian troops are reported to be stationed at the Ukrainian border.
- President Putin warns that NATO expansion into Ukraine would cross a 'red line".

December 2021-January 2022
- President Putin demands a set of security guarantees from the US and NATO. The US delivers written responses rejecting Russia's demand that Ukraine never be accepted into NATO.
- NATO sends ships and fighter jets into Eastern Europe, and US puts thousands of troops on alert.
- US and Western governments warn about the risk of a Russian invasion.

February 2022
- Putin discusses Ukrainian nationhood and recognizes the independence of two Russian-backed territories in Eastern Ukraine, Donetsk and Luhansk, in a televised address, and signs a decree to allow troops to enter the regions for "peacekeeping".
- Early on February 24, Russia launches a full-scale invasion of Ukraine. Zelensky imposes martial law, decrees a full military mobilization against Russia, and signs an official request for Ukraine to join the EU immediately under a special procedure.
- The US, UK, and other countries announce a wave of sanctions and trade restrictions against Russia.

1990 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

...and short history of the conflict

2022

March 2022
- Russian forces in Ukraine move to tighten siege of key cities, including Kyiv; Ukrainian resistance leads to a Russian retreat from the capital.
- Russia takes control of the southern city of Kherson, with Russian forces also partially occupying Luhansk, Donetsk, and Zaporizhzhia.
- Russia bombs a theater in Mariupol, where civilians had been sheltering.
- The International Court of Justice orders Russia to stop its invasion.
- Peace talks occur in Turkey, resulting in the Istanbul Communique, which is ultimately never agreed to.
- The US Congress passes a spending bill that includes $13.6bn in aid for Ukraine.

April 2022
- Russia launches a broad attack in Ukraine's Donbas region.
- The flagship of the Russian Black Sea Fleet, Moskva, is hit by Ukrainian missiles and sinks the following day.
- The UK, EU, and US announce additional sanctions against Russia. The US announces an additional $800mn in military aid to Ukraine.
- The UN General Assembly votes to suspend Russia's membership in the UN Human Rights Council.

May 2022
- Mariupol falls to Russian forces, effectively completing a land bridge to Crimea.
- Sweden and Finland apply to join NATO amid heightened security concerns about Russia.

June 2022
- The EU approves Ukraine's application to become a candidate country.
- Ukraine launches counteroffensive measures against Russia.

July 2022
- Russian energy company Gazprom announces it will reduce gas supplies to Europe through the Nord Stream 1 pipeline by half and later halts flows entirely.
- Russia and Ukraine agree to a deal to re-open Ukraine's Black Sea ports, which the Russian Navy had been blockading.

September 2022
- The Nord Stream natural gas pipelines, which ship gas from Russia to Germany, are damaged by a series of explosions.
- Ukraine widens counteroffensive measures in the northeast of the country near Kyiv.
- Putin signs "accession treaties" to annex four regions in Ukraine that it partially occupies: Zaporizhzhia, Luhansk, Donetsk, and Kherson.

October 2022
- Russia carries out strikes focused on Ukrainian infrastructure, including the power grid and other key energy infrastructure.
- An explosion damages the Crimean Bridge, which Ukraine later claims responsibility for.

November 2022
- Ukraine begins counteroffensive attacks in Kherson. Russian troops are forced to withdraw.

December 2022
- Zelensky visits the US, meeting with President Biden and addressing Congress in an effort to secure further US aid.
- Putin says Russia's war in Ukraine could turn into a "long-term process".

2023

January 2023
- Russia captures the Ukrainian town of Soledar.

February 2023
- President Biden visits Kyiv to meet with Zelensky before announcing an additional $500mn in aid. The next day, Putin announces that he has suspended the US-Russia nuclear treaty.

March 2023
- The International Criminal Court issues an arrest warrant for Putin.

May 2023
- Russia launches a barrage of strikes on Kyiv in one of the largest drone attacks yet.

June 2023
- The private Russian military company, Wagner Group, stages an armed uprising against Putin, but the rebellion ultimately ends.

July 2023
- Ukraine attacks the Crimean Bridge, damaging a portion of the bridge.
- Russia withdraws from a deal that allowed Ukraine to export grain across the Black Sea; afterward, Russia launches a series of attacks on Ukrainian port cities, including Odesa, Mykolaiv, and Chornomorsk.
- At the 2023 NATO summit in Vilnius, Lithuania, Ukraine is not extended an invitation to join the Alliance, despite Zelensky's wishes.

November 2024
- The Ukrainian commander in chief says that Ukraine and Russia "have reached the level of technology that puts us into a stalemate".

December 2023
- Russia launches strikes on Ukraine in what the Ukrainian military calls the "largest strike since the beginning of the full-scale invasion".

2024

February 2024
- Russian forces take control of the city of Avdiivka in eastern Ukraine.

March 2024
- Russia holds presidential elections in which Putin is reelected for a fifth term.

April 2024
- The US approves an additional $61bn in aid to Ukraine.

June 2024
- The US signs a bilateral security commitment with Ukraine.
- The G7 announces US$50bn in financial assistance to Ukraine consisting of loans backed by the proceeds from immobilized Russian reserve assets. This represents the single largest source of financing for Ukraine in 2025-26.
- Russia and North Korea sign an agreement to come to each other's aid if either country faces "aggression".

August 2024
- Ukraine launches a surprise incursion into the Russian region of Kursk, but is forced to withdraw as Russia deploys over 50,000 troops to counter the attack.

November 2024
- Donald Trump is reelected as the US president. During his campaign, he promises to end the war in Ukraine within 24 hours of assuming office. Zelensky congratulates Trump, saying he looks forward to a "strong" US under his "decisive leadership".
- North Korea sends troops to Russia to help Russian forces.

2025

January 2025
- Trump is inaugurated as president of the United States.
- Trump says it's time to "make a deal" on the Russia-Ukraine war and that without a deal, he may be forced to place further restrictions on Russia.

February 2025
- Trump has a call with Putin; afterwards, Trump says that negotiations to end the Russia-Ukraine war will start "immediately".
- Zelensky says that US-Russia talks are happening "behind Ukraine's back" and "decisions about Ukraine are being made without Ukraine". Trump says he is disappointed by Ukraine's reaction.
- The US votes against a UN General Assembly Resolution condemning Russia's war against Ukraine, joining Russia in doing so.
- Trump and Zelensky meet in the White House to discuss a critical minerals deal, but the meeting turns tense and Zelensky leaves without a deal being made.

March 2025
- Trump halts US military aid to Ukraine as well as intelligence sharing.
- Zelensky says the tense White House meeting with Trump was "regrettable" and that "Ukraine is ready to come to the negotiating table as soon as possible to bring lasting peace closer".
- US-Ukraine talks in Saudi Arabia lead Trump Administration to resume military aid and intelligence sharing. Ukraine also agrees to implement 30-day ceasefire, contingent on Russia's acceptance; Russia so far has not agreed.

Note: This is not an exhaustive list of all developments regarding the Russia-Ukraine war.
Source: Council on Foreign Relations, UK House of Commons Library, NY Times, World Economic Forum, various news sources, compiled by Goldman Sachs GIR.

War and 'peace'...in their words

"The so-called civilized world, of which our Western colleagues have self-appointed themselves the only representatives, prefers not to notice [the situation in the Donbas] as if there isn't a genocide through which nearly four million people are being put through, all simply because these people did not agree to the Western coup of Ukraine in 2014."

- *Address by President Putin, February 2022*

"When some propose alternatives, half-hearted settlement plans—so-called sets of principles—it not only ignores the interests and suffering of Ukrainians, who are affected by the war the most, it not only ignores reality, but also gives Putin the political space to continue the war and pressure the world to bring more nations under control. Any parallel or alternative attempts to seek peace are, in fact, efforts to achieve a lull instead of an end to the war, as a global initiative—the Peace Formula—has already existed for two years. And maybe somebody wants a Nobel Prize for their political biography for frozen truce instead of real peace, but the only prizes Putin will give you in return are more suffering and disasters."

- *President Zelensky UN General Assembly Speech, September 2024*

"I just had a lengthy and highly productive phone call with President Vladimir Putin of Russia... as we both agreed, we want to stop the millions of deaths taking place in the War with Russia/Ukraine... We agreed to work together, very closely, including visiting each other's Nations. We have also agreed to have our respective teams start negotiations immediately, and we will begin by calling President Zelenskyy, of Ukraine, to inform him of the conversation..."

- *President Trump Truth Social post, February 2025*

"What happened at the White House on Friday [February 28], of course, demonstrated how difficult it will be to reach a settlement trajectory around Ukraine. The Kyiv regime and Zelensky do not want peace. They want the war to continue."

- *Remarks by Kremlin spokesman Dmitry Peskov, March 2025*

"We are ready to work fast to end the war, and the first stages could be the release of prisoners and truce in the sky—ban on missiles, long-ranged drones, bombs on energy and other civilian infrastructure—and truce in the sea immediately, if Russia will do the same. Then we want to move very fast through all next stages and to work with the US to agree a strong final deal."

- *President Zelensky social media post and letter to President Trump, March 2025*

"I appreciate that [Zelensky] sent this letter, just got it a little while ago. Simultaneously, we've had serious discussions with Russia and have received strong signals that they are ready for peace."

- *President Trump's speech to Congress, March 2025*

"We will categorically not tolerate such actions. Again, I want to emphasize that this would not be a so-called hybrid involvement but direct, official and undisguised participation of NATO countries in a war against the Russian Federation..."

- *Remarks by Russian Foreign Minister Sergei Lavrov regarding the deployment of European troops in Ukraine, March 2025*

"Today we made an offer which the Ukrainians have accepted, which is to enter into a ceasefire and into immediate negotiations to end this conflict in a way that's enduring and sustainable and accounts for their interests, their security, their ability to prosper as a nation... We will take this offer now to the Russians and we hope that they'll say 'yes,' that they'll say 'yes' to peace. The ball is now in their court."

- *Remarks by Secretary of State Marco Rubio following US-Ukraine talks in Saudi Arabia, March 2025*

Source: Truth Social, X, various speeches, interviews, and texts, compiled by Goldman Sachs GIR.

The (partial) return of Russian gas

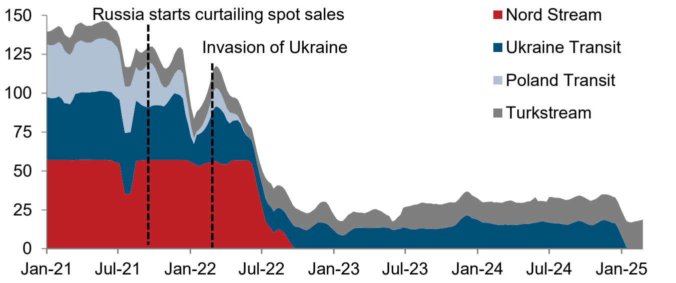
Samantha Dart argues that a restoration of Russian gas flows to Europe on a potential Ukraine peace deal would significantly weigh on European gas prices

One of the main differences between natural gas and oil markets is the lack of spare capacity in global natural gas supply. Sure, within a market like the US, shale gas production can respond to higher prices in a matter of months. But sending that incremental natural gas to other regions can be more challenging. Unless the destination is connected to the source via a pipeline, the gas needs to be liquefied in highly specialized facilities, which take years to build.

So, when Russia started to curtail its natural gas supply to Europe in the fall of 2021, Europe couldn't do much, except allow its gas prices to rise to discourage demand. With Russian gas at the time supplying over 20% of Europe's consumption, it took European gas prices rising more than ten times their historical average to generate enough gas demand destruction during 2022 to leave enough natural gas in European storage facilities ahead of the following winter. To be sure, part of this demand destruction took place elsewhere in the world. Pakistan and Bangladesh, among others, went through rolling blackouts because they couldn't afford to import the liquefied natural gas (LNG) that Europe was competing for at record-high prices. But the imported LNG Europe attracted wasn't enough to offset the loss of Russian gas. So, European domestic demand had to decline through household conservation efforts and a collapse in energy-intensive industrial activity.

Russian pipeline exports to Europe, which once supplied over 20% of European demand, have been almost completely curtailed

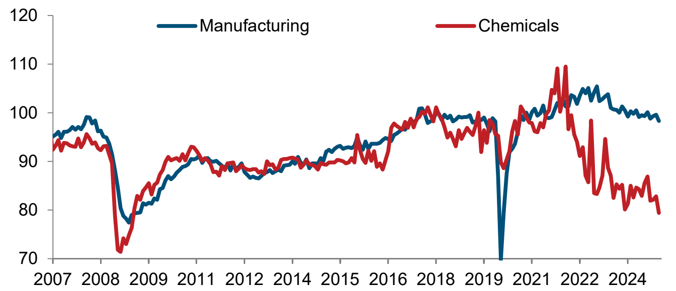
Russian pipeline exports to Europe by route, Bcm/y



Source: Entsog, Bruegel, Goldman Sachs GIR.

Energy-intensive manufacturing in Europe has collapsed since the energy crisis

EU IP for manufacturing and the chemicals sector, index, 2021=100



Source: Eurostat, Goldman Sachs GIR.

As hopes of a potential resolution of the Russia-Ukraine conflict have risen, markets have started to price in the prospect of a restoration of Russian gas flows. We take no view on the odds of the ongoing conflict ending, and for the purposes of our gas balances assume that the status quo continues, with no incremental Russian gas incorporated into our forecasts. That said, should a peace deal be reached, we believe it would likely include the restoration of at least some gas flows, given that Russia (via increased gas sales revenue), Ukraine (via transit fees revenue), the EU (via cheaper gas), and the US (via lower foreign aid) would all benefit from renewed gas flows.

While we view it as unlikely that Russian gas flows return to their pre-war levels in the near term given the political challenges associated with normalizing gas flows through routes in Germany and Poland, the increase in gas availability for Europe could still be significant. Specifically, if Russian gas flows through Ukraine returned to pre-war levels of 42 Bcm/y, we would expect summer 2025 European gas prices approximately 50% below our 50 EUR/MWh ($15.10/mmBtu) base case and 2026 prices below pre-war levels of 20 EUR/MWh. This is because, even though LNG would remain Europe's marginal source of gas, the incremental supply from Russia would lead European gas storage to fill so quickly that, to avoid storage congestion, gas prices would have to fall to find incremental demand (domestically and elsewhere in the world). As a result, LNG prices—which currently incorporate significant profit margins for LNG exporters--would fall alongside European gas prices to balance global markets. Downside to prices would be more moderate under an only-partial restoration of Russian flows through Ukraine, which could be the case given both the complexity of ongoing negotiations and the risk that damage to Ukraine's domestic energy infrastructure might interfere with its gas transit routes to Western Europe.

To be clear, even without any increase in Russian gas supply, we expect sharply lower European gas prices later this decade as the significant LNG export capacity currently under construction comes online over the next five years. As such, a restoration of Russian gas flows would just exacerbate and accelerate our long-term bearish European gas price view.

However, even with much lower European gas prices, we don't expect European gas demand to ever return to pre-crisis levels. Household conservation efforts tend to be sticky. European industrial activity has also suffered permanent losses owing to capacity offshoring, while European exports to China have come under pressure due to China's own industrial capacity growth. This sharp loss of demand may be partially reversed should Europe enter a period of sustained defense and infrastructure spending that it appears to be on the cusp of, but that remains to be seen.

Samantha Dart, Co-head of Global Commodities Research

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Interview with Camille Grand

Camille Grand. served as Assistant Secretary General for Defense Investment at NATO (2016-22). He is a Distinguished Policy Fellow at the European Council on Foreign Relations. Below, he discusses the gaps in Europe's military capabilities and what it will take to address them, arguing that an enduring sea change is afoot for European defense policy.

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

Allison Nathan: Amid the ongoing transformation of the European security landscape, where are the biggest gaps in Europe's ability to defend itself?

Camille Grand: In terms of military capabilities, the first major gap is in mass and readiness. European armed forces have shrunk to a problematic level in the decades since the Cold War. For example, during the Cold War, a medium-sized country like the Netherlands was able to field an entire army corps in the battlefield whereas today it would struggle to field a full armoured brigade, and the same applies to almost every single European army. Even the German army, which was the largest land force in Europe during the Cold War, now operates only a couple of hundred tanks versus roughly 4000 at its Cold War peak. And the British Army of the Rhine deployed in Germany during the Cold War was larger than the current size of the entire British Army.

But even more problematic than mass is the readiness of the armed forces. In recent decades, the US has become so critical to European security largely because of its ability to deploy fairly large forces abroad at short notice, essentially providing the cavalry in the event of a crisis. Europe effectively has no ability to quickly deploy significant formations beyond a few hundred or perhaps a few thousand forces today versus NATO's target of being able to field 100k armed forces within a week and 500k within a few months.

The second major gap revolves around equipment. The gap is not especially large relative to US capabilities when it comes to the outright amount of traditional military hardware, including combat aircraft, tanks, artillery, etc; Europeans field the largest portion of traditional peacetime military platforms within Europe. The major deficiency is rather in "strategic enablers": advanced, rare capabilities that help glue military forces together and which are absolutely necessary for modern warfare. These capabilities might include air-to-air refueling aircraft to run fast-paced air operations, airborne surveillance capabilities, command and control assets, and space and intelligence assets—all of which the US has far greater capability in than Europe. In the post-Cold War era, European forces were effectively designed to be plug and play assets into a US-led coalition, where the US would provide the strategic enablers. If this is no longer the case, Europe will urgently have to address its gaping gap in such capabilities.

Last but not least is the gap in nuclear capabilities. Of course, Britain and France are nuclear states, but in number and capabilities are no match for the US, which has always been the principal provider of extended nuclear deterrence in the NATO environment, while Russia remains a nuclear superpower even as its conventional military might has been diminished by the war in Ukraine. That said, while non-nuclear European states do seek more nuclear assurances from Britain and France, I don't think nuclear proliferation in Europe to close the gap in nuclear deterrence is likely for several reasons, not least of which is the staggering cost and investment required to do so. Many more moves by Washington as well as signals from London and Paris that they might prove unreliable in terms of extending nuclear deterrence to their European neighbors would be required before we arrive at that point.

Allison Nathan: You previously served as NATO's Assistant Secretary General for Defense Investment. What would the process of attempting to address these gaps look like, and how is it coordinated across countries?

Camille Grand: Alongside each NATO member's political commitment to spend at least 2% of their GDP on defense, the NATO Defense Planning Process assigns targets/objectives for military capabilities to ensure that countries are not engaging in duplicative efforts in meeting NATO's needs. This process is detailed and granular. For example, NATO defense planning may ask a country to commit to supplying a certain number of brigades, transport aircraft, or submarines. Targets are often agreed to after some negotiation, which can be tough given allies' individual needs, priorities, and fiscal situations. But the Defense Planning Process is the only NATO process that doesn't require a consensus. Rather, decisions are made by consensus minus one so that no country can unilaterally veto the targets ultimately assigned to it, and peer pressure helps hold allies accountable for these targets. Outside of the largest countries, this NATO Defense Planning Process effectively serves as countries' guidance to build their military.

But once targets for military capabilities are agreed upon, industry fragmentation does complicate the delivery. Europeans have 17 different types of armored personnel carriers—versus the US' two types—because many countries want to support its own armored vehicle champion by using their design.

NATO and/or the EU can play a role in reducing these costly inefficiencies, especially when it comes to more advanced and expensive capabilities, by helping to design a single platform for multiple countries, or by coordinating countries to purchase such capabilities jointly. For example, NATO, alongside the EU and many other agencies, enabled the joint development of a fleet of air tankers for eight participating countries, one of which was Luxembourg, which paid for the equivalent of a tanker but doesn't even have an Air Force. This type of coordination that delivered a necessary capability within only a few years is a good template for how Europe may begin to develop and acquire the strategic enablers it needs without any one country bearing too much of the cost. And the EU can play a further role by potentially subsidizing or funding some of the development of, or joint acquisition of, such platforms, thereby covering some of the costs of cooperation.

Allison Nathan: A narrative is taking hold that Europe is entering a new era of defense strategy and spending that represents nothing less than a dramatic sea change. Is that narrative right, or overdone?

Camille Grand: The EU is particularly good at making large announcements that, when unpacked, aren't so drastic after all. For example, the €800 billion that the European Commission recently announced for rearmament is in fact just a relaxation of fiscal rules that will enable EU countries to spend more. That is a positive and perhaps overdue development, but is not as positive as if it were €800 billion of new cash for countries to spend. That's the glass half-empty interpretation.

But I am inclined to view recent developments through a glass half-full lens. The EU, which was a non-player in defense five years ago, is now becoming an active facilitator for cooperation, research and development, and eventually acquisition of security capabilities. The European Commission's White Paper on defense that is set to be released on March 19 will provide more detail on their level of ambition in terms of funding amounts and priorities, so that will warrant close review. And it will then probably take another few months to secure the budget to execute this plan. But the EU has undeniably turned a corner from spending zero on defense a decade ago to spending a few billion euros a year today to probably spending tens of billions of euros a year in the coming years, which will leave it at least as large a European player in defense acquisition as Germany or France.

And the recent decisions of several European countries to substantially increase defense spending are undoubtedly encouraging. In particular, Germany's announcement of its intention to spend €500 billion on defense over the coming years is especially significant not only because that represents a tripling of its defense budget, but also because Germany has been a bit of an outlier as a wealthy country that chronically underspent for decades. So, this represents a quite important shift. In the meantime, France and Britain, which have consistently spent more on defense in recent years, are also significantly increasing their defense budgets by around 50% over less than a decade. And the strong economies of northern Europe are doubling their defense budgets. So, markets are right to be optimistic that Europe is now really reinvesting in defense, and a substantial amount of money is set to be spent on defense in Europe.

To put some numbers on this, Europe has spent €440 billion in 2024 on defense—with EU countries alone accounting for €326 billion of that total. On an absolute basis, those numbers are still relatively small compared to the US. But, on a GDP basis, many European countries are getting closer to or outspending the US. In pure numbers, Europe is now outspending Russia 3 to 1 and is spending roughly 1 to 1 on a purchasing power parity basis. And that spending is on track to grow by another 50% in the coming years to reach 3% of GDP in Europe, so this is a real and significant change.

Allison Nathan: But could political hurdles impede the actual execution of these efforts?

Camille Grand: It's true that most European countries have strong—but not necessarily overwhelming—constituencies that are questioning the merits of a rise in defense spending. Interestingly, these hesitations are largely coming from far-right political parties that are friendly with the Trump Administration. That said, on average, surveys suggest that around 76% of European citizens support maintaining or significantly increasing defense spending, and the majority parties in most parliaments favor it. Of course, that could change given the growing support for some parties that oppose robust defense spending, either because they are reluctant to invest in European projects—such as the National Rally in France—or because they consider themselves "peace" parties—such as the AfD and the Greens in Germany.

But I'm not that concerned that political—or economic, for that matter—obstacles will prevail. That's largely because the required shifts are significant but not massive in the scheme of the overall economy. For most European countries, we are basically talking about shifting one or two percentage points of public spending to defense from relatively high social spending, which is far from a butter vs. guns dilemma or the prioritization of warfare over welfare. Such a shift would not entail a dramatic transformation of the European social model. Indebted countries will perhaps struggle a bit more, but executing on this effort should be manageable with relatively moderate changes and some loosening of the fiscal rules for almost all countries.

Allison Nathan: President Trump's skepticism around NATO and failure so far to commit to security guarantees has undoubtedly played a role in Europe's rising defense efforts, but that attitude may not endure into the next US administration. So, how convinced are you that this sea change in European defense policy will endure?

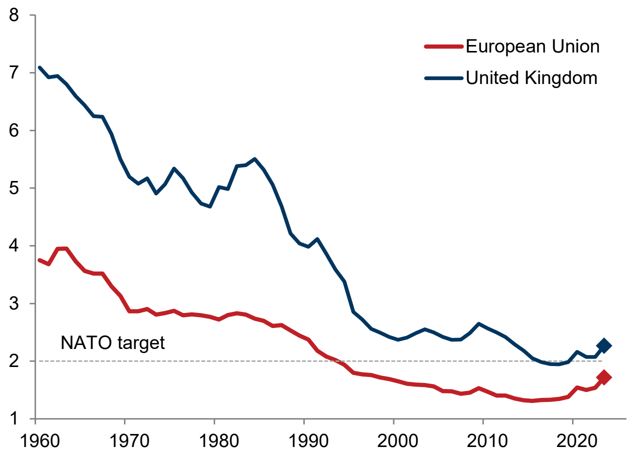
Camille Grand: I have argued for some time that these shifts must happen no matter who is in the White House. The need for burden sharing existed before President Trump and will persist after him given that the US itself is resource-constrained when it comes to defense and is undoubtedly shifting prioritization of its defense capabilities to the Indo-Pacific. And while Europeans may have perceived Trump's first election victory as an anomaly in a US that was otherwise committed to European security, his reelection has served as a clear signal that a large US constituency is at best less committed to devote resources to European security and at worst inclined to move away from that commitment entirely. So, I am confident that we are experiencing a sea change on European defense policy as opposed to a more temporary, cosmetic shift to appease Trump until he leaves office.

And the reality is that the primary driver of this sea change in European defense is not the behavior of Donald Trump, but the behavior of Vladimir Putin, who remains unthwarted and might even become further emboldened if the conflict in Ukraine ends in his favor. So, a geopolitical environment that is increasingly unfavorable to Europe's interests is the real forcing factor here; US pressure is simply adding to that, because the solution is no longer that the US will take care of things, as it has done for decades.

A snapshot of the state of EU defense

Defense spending in Europe has fallen as a share of GDP since the 1960s, reaching the lowest level in the last decade, but it began to rise in 2022 following Russia's invasion of Ukraine

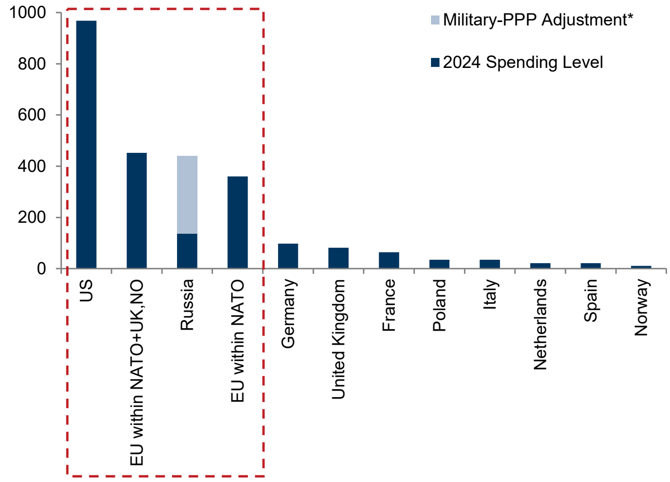
Military expenditure, % of GDP



Source: World Bank, Goldman Sachs GIR.

Europe is significantly outspent by the US on defense, though it spends on par with Russia in PPP-adjusted terms

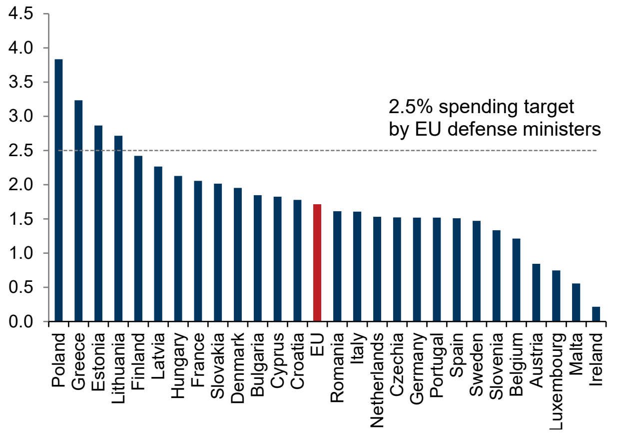
Absolute military spending levels, $bn



*Adjusted for price differential vs. the US (Robertson, 2021 and SIPRI).
Source: SIPRI, NATO, Robertson (2021), Goldman Sachs GIR.

Only a few EU countries exceed the 2.5% of GDP defense spending target recently outlined by EU defense minsters

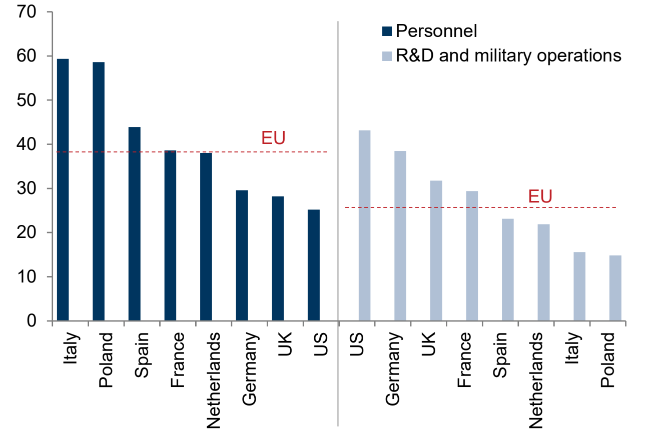
Defense spending by EU countries in 2023, % of GDP



Source: World Bank, Goldman Sachs GIR.

European defense expenditure remains structurally and technologically outdated, overfunding personnel instead of investing in research and operations…

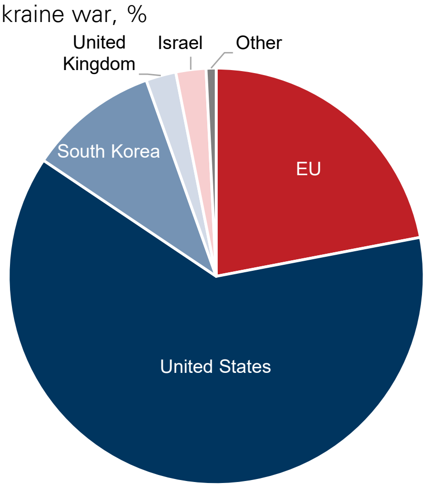
Defense expenditure composition, %



Source: Haver Analytics, Goldman Sachs GIR.

…and Europe imports a large share of the military equipment it spends money on

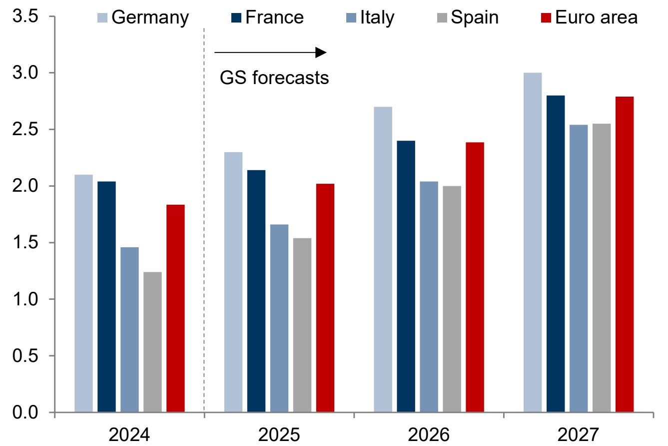
Import share of equipment sourced in the EU since the start of Russia-Ukraine war, %



Note: Based on value of defense acquisitions announced by EU countries from the start of the Russia-Ukraine war to June 2023.
Source: Institut de Relations Internationals, Goldman Sachs GIR.

However, increased urgency for greater European defense expenditure suggests more spending ahead; we forecast EU military spending to near 3% of GDP by 2027

Military expenditure, % of GDP



Source: NATO, Goldman Sachs GIR.

Special thanks to the GS European Economics team for charts.

More defense: good start, open questions

Filippo Taddei argues that the process to increase European defense spending will be gradual and complicated

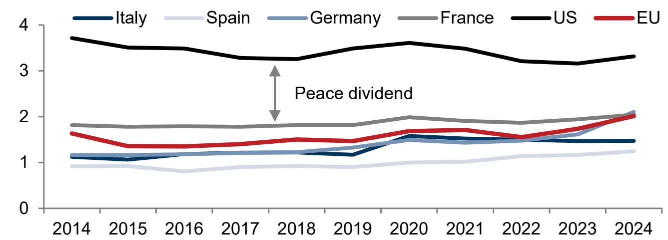
Last week, marking her first 100 days in office, President of the EU Commission Ursula von der Leyen announced ReArm Europe, an EU initiative to significantly scale up military equipment and infrastructure. On the same day, Germany delivered an unprecedented fiscal announcement entailing an exclusion of defense spending over a predetermined threshold from the debt brake as well as €500bn of infrastructure investment over the next decade. While these steps to reshape European defense are momentous, the process to do so will be gradual and complex.

Not all countries start alike

The recent developments lead us to now expect defense spending to rise to almost 3% of GDP by 2027 in key Euro area countries (see pg. 16). The transition toward a higher level of spending will require a multi-year plan that entails allocating an additional 1% of Euro area GDP annually to defense by the end of the next three years. However, European countries differ in available fiscal space and targets. While Germany will need to increase defense spending by only 0.9% of GDP, Italy will aim for an additional 1% of GDP, and Spain has to clear an even higher hurdle of 1.4% of GDP.

Uneven starting points…

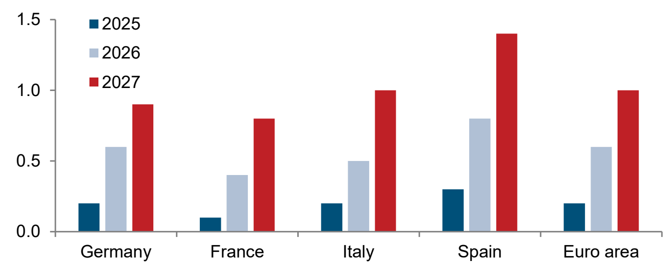
Defense spending, % of GDP



Source: NATO, Goldman Sachs GIR

…on the road to higher defense spending

GS estimates of additional defense spending, pp



Source: Goldman Sachs GIR.

A promising start…

On February 14, President von der Leyen proposed triggering the escape clause within European fiscal rules to allow member states to "substantially increase their defense expenditure". This proposal has the advantage of allowing prompt funding at the national level. But it provides only a temporary solution and leaves national defense spending exposed to sovereign market stress, reducing the likelihood of coordinated and harmonized military spending within the EU.

European policymakers have recognized the challenge. When ReArm Europe was announced, the proposal included both increased flexibility in national budgets and a new funding instrument worth €150bn (0.9% of EU GDP). The new facility could be used to raise funds through additional EU debt in order to extend cheaper loans to fund defense spending in member states with higher borrowing costs.

…but the details matter…

While these developments are promising, the road ahead runs into various institutional hurdles that will likely slow progress. The NextGenerationEU/Recovery Fund (NGEU)—Europe's pandemic program that launched in 2020—came after a lengthy negotiation and approval process that included both unanimity in the EU Council and ratification by every national parliament. Any new EU program that needs funding through EU debt issuance employs the EU budget as a guarantee for repayments in addition to the obligation of the individual country receiving the loan. Such a guarantee requires every EU member state—not just the majority—to agree to extend EU budget coverage to the new EU debt. The new European defense facility announced by the EU Commission would need to go through the same process, likely postponing the initiative's deployment until early 2026. And if even one member does not agree, the initiative may never take off at all.

An alternative to facilitate earlier deployment of EU funding is repurposing the spare financial capacity within the EU budget. Not every country took full advantage of the pandemic NGEU fund and other European programs, which has left it some funded fiscal space without purpose. At the beginning of the energy crisis, the EU had already introduced some repurposing of the original NGEU funds vis-à-vis REPowerEU, the initiative for the green transition. The EU could apply the same blueprint for defense spending in the next EU Council (March 20-21). This option has the advantage of a shorter process (it would only require a qualified majority in the EU Council) and faster implementation, as was the case with early pandemic support for unemployment support (SURE) and REPowerEU. Although uncertainty regarding the adoption of this option remains elevated, we expect that next week's EU Council will eventually agree to it.

…and progress will be slow

Even if policymakers appear willing, the NGEU program expires in 2026 and the Multiannual Financial Framework in 2027. A new program needs to be established in order to continue issuing EU debt and fund loans to member states for defense spending beyond these dates. As such, we continue to expect that, after using national debt and repurposing spare EU budget funds, the EU will agree on a new more lasting funding facility for defense. While the repurposing of spare financial capacity in the EU budget could allow new EU debt to be issued in few quarters, the bulk of the shift in European fiscal policy will likely only begin in 2026, making increasing defense spending a more gradual process than many may have hoped.

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A likely growth boost for Europe

Sven Jari Stehn sees likely growth upside for Europe from higher EU defense spending and a potential ceasefire in Ukraine

Three years after Russia's invasion of Ukraine, attention has shifted to the potential for a ceasefire and a rise in European military spending amid recent developments from the Trump Administration. We think both could have important repercussions for the European economy, raising growth in the coming years if they ultimately come to pass.

A boost from higher defense spending…

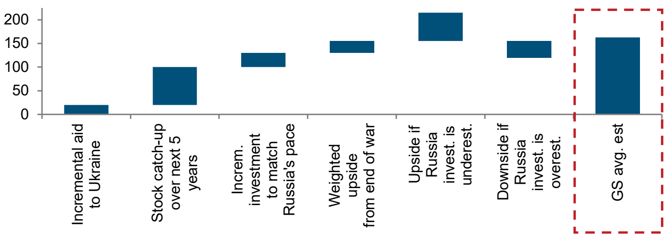
Trump's decision to pause military aid to Ukraine has increased the pressure on Europe to become increasingly independent from a security and defense perspective. We estimate that rebuilding Europe's stocks of military equipment after decades of underinvestment and matching Russia's annual investment in new supplies will require around €160bn per annum (0.8% of European GDP) of additional military spending over the next five years, with this estimate likely just the lower bound.

Consistent with this, and given the recent political developments out of Europe, we now expect defense spending to rise from 2% of GDP currently to almost 3% by 2027 in key Euro area countries. We expect the largest increase in Germany given years of underspending and significant fiscal space.

The growth implications of such a rise will likely initially be moderate—with a growth multiplier of only 0.5—as Europe will need to import a significant share of its defense needs until it can sufficiently expand the scale of its defense industry.

A significant rise in European military spending likely lies ahead

Increase in annual military spending needed in Europe*, €bn



**Our upside scenario assumes the production rise since 2022 is undermeasured. We consider the increase in employment in the military-industrial complex in Russia and the increase observed in Ex 11 in the 3/10 European Economics Analyst as alternative proxies. The downside scenario assumes 50% of the rise in Russian production since 2022 owes to refurbishment of old stock and thus unsustainable once stocks exhaust.*

Source: European Commission, European Council, Kiel Institute, Bruegel, GS GIR.

This, together with the recently-announced German infrastructure program, led us to recently lift our Euro area growth forecast by 0.1pp/0.2pp/0.2pp in 2025/2026/2027, and we now look for Euro area growth of 0.8% this year, 1.3% in 2026, and 1.6% in 2027. Such growth would be a light at the end of a tunnel after several years of below-trend growth.

…and another from a potential ceasefire

A ceasefire in Ukraine could imply further growth upside via several transmission channels:

1. Energy. The market for natural gas—which played the key role in propagating the effects of the war into the Euro area—will likely again be the most important transmission channel. Consistent with our commodity strategists (see pg. 11), we consider a limited gas flow scenario (with a modest decline in gas prices) and an upside scenario (with a sharp drop in prices).

2. Confidence. Consumer sentiment dropped sharply across the Euro area with the onset of the conflict, implying potential for a rebound on a ceasefire. However, we find only small potential gains in confidence given that high inflation played the key role in depressing confidence after the war began and measures of geopolitical risk have now largely normalized.

3. Reconstruction. The rebuilding of Ukraine's damaged infrastructure could also support growth across Europe. Our CEEMEA economists' rebuilding scenarios, however, point to limited spillovers into the rest of Europe given that much of the destruction relates to occupied territories and many industries are unlikely to be viable again (see pgs. 22-23).

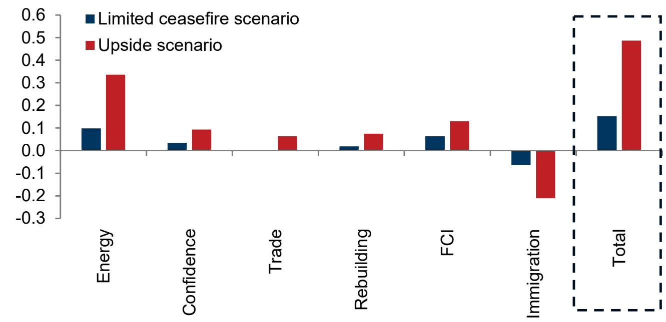
4. Demographics. The UN estimates that 2.6mn Ukrainian refugees have moved into the Euro area since the war's outbreak. We find that the refugees have notably boosted Euro area labor supply and entailed a significant rise in public spending, suggesting downside for European growth if a notable share of refugees return to Ukraine.

5. Financial conditions. The war tightened financial conditions across Europe as markets priced the conflict as a risk-off event, with sharp declines in equity prices and long-term bond yields. We assume some of this tightening would unwind in the event of a ceasefire, entailing a small boost to Euro area growth.

Taken together, our analysis points to a potential Euro area GDP increase of 0.2% in a limited ceasefire scenario and a 0.5% boost in an upside scenario with a comprehensive and credible resolution to the conflict. As such, we see modest European growth upside from a ceasefire, unless a comprehensive peace agreement can be reached.

A ceasefire would likely entail European growth upside

Potential effect of Ukraine ceasefire on Euro area real GDP by scenario, %



Source: Haver Analytics, Goldman Sachs GIR.

The read-across for monetary policy: higher rates

The growth boost from rising military spending and a potential ceasefire agreement lower the pressure on the ECB to reduce rates below neutral. We therefore recently dropped a rate cut from our forecast and now expect a terminal ECB policy rate of 2% in June. While a cut at the April meeting is also now a close call, we maintain our forecast for 25bp rate cuts in April and June given subdued spot growth, ongoing disinflation progress, and continued downside risk from trade tensions.

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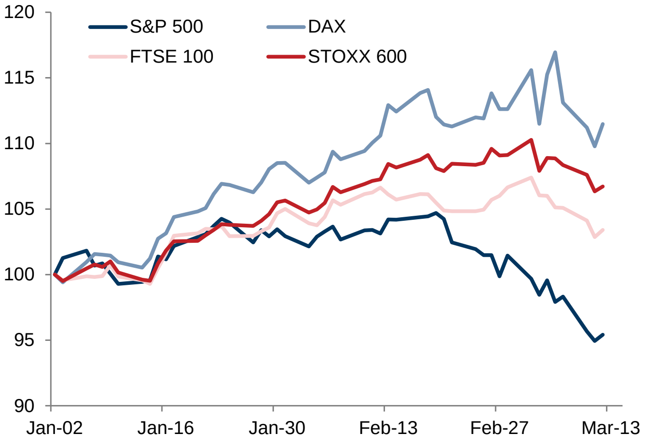
What's happening in European assets?

European equites have outperformed US equities this year amid optimism about potential growth upside from a Russia-Ukraine peace deal and higher defense spending…

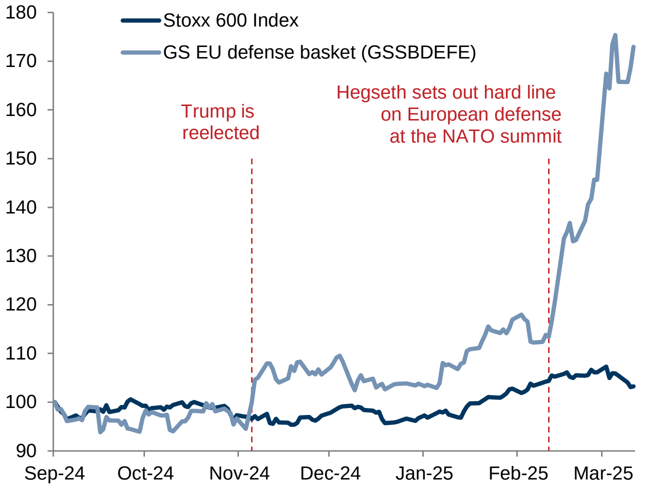
European equities, index, 1/2/2025=100



Source: Bloomberg, Goldman Sachs GIR.

…with the European defense sector sharply outperforming

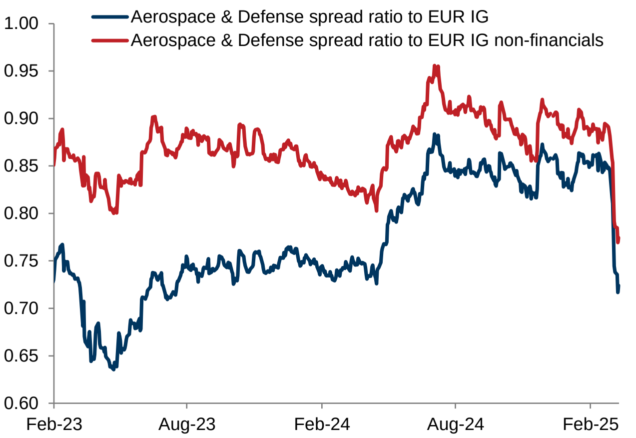
European equities, index, 9/2/2024=100



Source: Bloomberg, Goldman Sachs GIR.

Aerospace and Defense credits have outperformed on the fiscal pivot and promise of greater defense spending, but the broader EUR market has been more muted, partly due to the small weight of these industries in the broader index

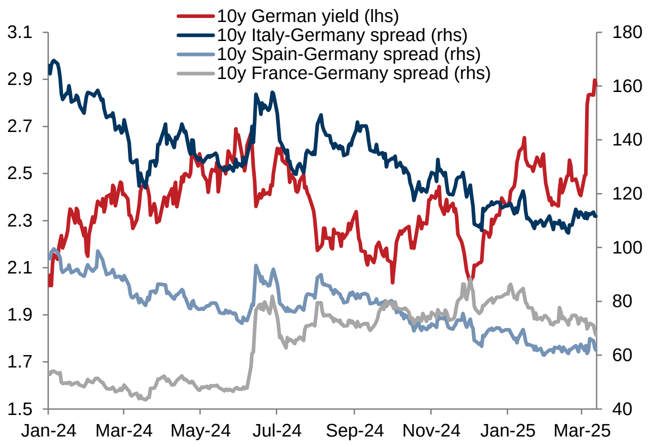
Aerospace and Defense spread ratio to EUR credit



Source: Bloomberg, Goldman Sachs GIR.

Bund yields have risen sharply as Germany has taken steps to lead the defense spending charge, although the reaction in sovereign spreads has been limited so far

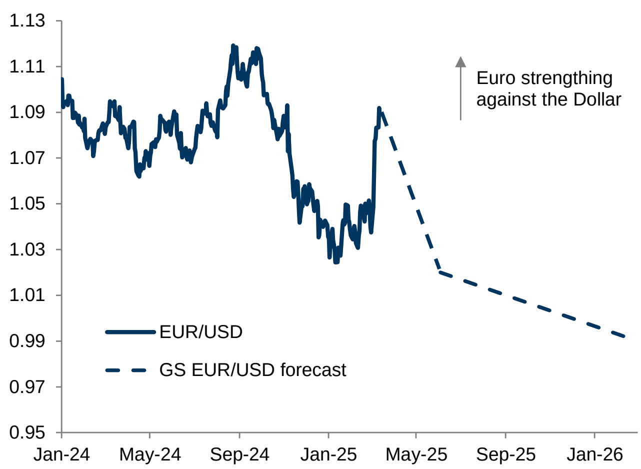
10y Bund yield (lhs, bp) vs. 10y sovereign spreads to German Bund yield (rhs, bp)



Source: Bloomberg, Goldman Sachs GIR.

Markets have priced a stronger Euro alongside optimism on a peace deal and stronger fiscal support, though we expect likely higher US tariffs to ultimately take EUR/USD back lower

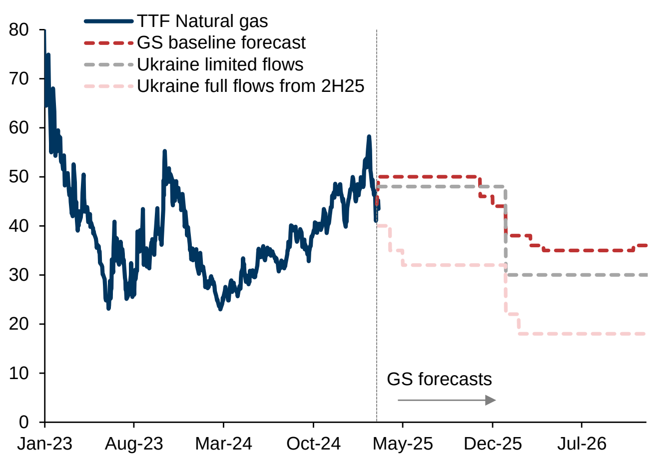
EUR/USD



Source: Bloomberg, Goldman Sachs GIR.

A potential peace deal that results in incremental Russian gas flows to Europe would weigh on gas prices, posing downside risk to our TTF price forecasts

European natural gas (TTF) prices, EUR/MWh



Source: ICE, S&P Global Commodity Insights, Goldman Sachs GIR.

A snapshot of our European asset views

What do the developments in the Russia-Ukraine conflict and, more importantly, Europe's evolving security landscape mean for your asset class?

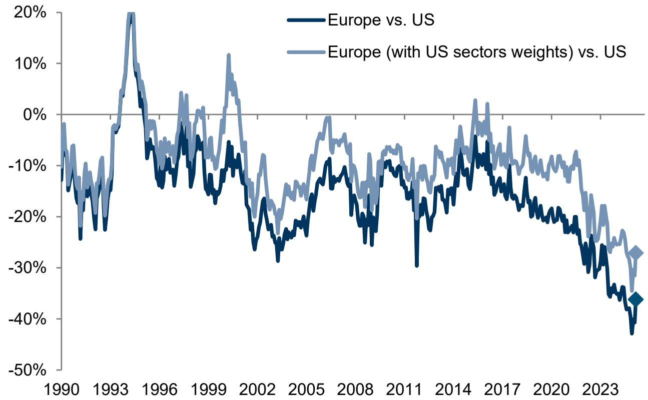
EUROPEAN EQUITIES

Peter Oppenheimer

- Despite the strongly held consensus view coming into the year that the US equity market would continue to outperform other markets, led by the technology sector, several factors have led to substantial European outperformance in recent months, including increased hopes of a Russia-Ukraine peace deal that boosted optimism around the potential for lower gas prices and stronger European growth, and several announcements around higher European spending—particularly defense spending. Improving economic data in Europe versus weakening data in the US, as well as concerns about capex spend and increasing competition for US mega cap tech also contributed to this underperformance.
- We had argued that valuation spreads between the US and European equity markets had become too wide on the market's expectations of continued US outperformance, and, even after the recent market moves, believe that remains the case. While European P/E ratios have risen to above long-run averages, a roughly 30% gap remains between European and US equity valuations, leaving the European outperformance story with room to run.

Europe continues to trade at a significant discount to the US

Europe relative to US 12m forward P/E



Source. Datastream, STOXX, Worldscope, Goldman Sachs GIR.

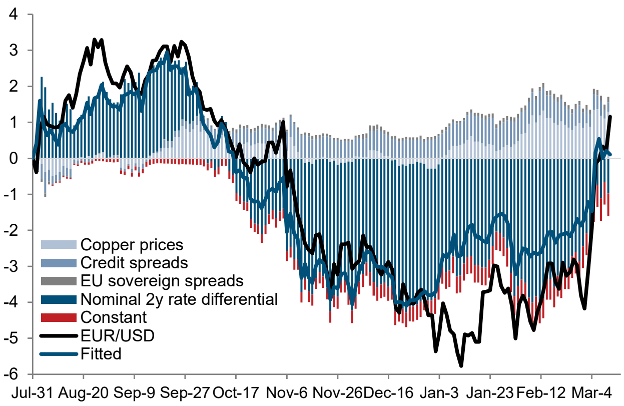
EUROPEAN CURRENCIES

Kamakshya Trivedi, Michael Cahill, Lexi Kanter

- The recent unprecedented fiscal announcements out of Germany as well as optimism around a Russia-Ukraine peace deal have propelled the Euro's recent rise against the Dollar, but the reaction goes beyond the fundamentals of a likely improvement in terms of trade and somewhat stronger growth over the next few years. This seems somewhat reasonable, as increased German spending and peace on the continent could have a meaningful impact on the currency if they help reverse years of European underperformance and outflows into US assets.
- However, challenges remain. Beyond the near-term uncertainty of which proposals will ultimately pass, actual spending changes could be underwhelming in both size and scope. And while German spending is important, area-wide spending matters most. This makes the linkage from German to periphery policy changes especially important, though, importantly, more coordinated spending programs will likely take much longer to implement. These fiscal changes are also being made in the context of shifting US policies, some of which should still support the Dollar more broadly.
- All that said, Europe's more proactive policy stance should curtail the potential downside in a trade-sensitive cross like EUR/USD. It also opens the door to a weaker Swiss Franc in particular given its status as the regional safe-haven currency.
- CEE currencies, together with the broader European asset complex, have also been buoyed by rising expectations of a ceasefire deal in Ukraine. However, we think these currencies now embed only limited 'conflict' risk premium that could lead to appreciation on the back of a peace deal. The sharp rise in inflation and large deterioration in external balances across the CEE caused by the initial invasion in February 2022 have largely corrected since. And CEE currencies now screen as overvalued (CZK, PLN) to roughly fairly valued (HUF) versus the Euro in our frameworks.

The Euro's recent rise has likely exceeded the shift in fundamentals, but the move seems somewhat reasonable

EUR/USD actual vs. model-implied performance, %



Source. Goldman Sachs, Goldman Sachs GIR.

- In the near term, market sentiment on peace discussions and European fiscal developments can continue to be the main driver of CEE FX to the extent they lead to broader growth upgrades and new investment. But looking further ahead, we see limited scope for further optimism to be priced in at current levels, especially given the potential for US tariffs on European autos, which pose significant downside growth risks to the CEE economies.

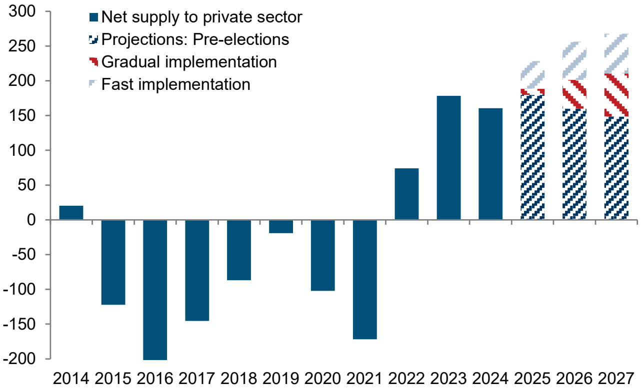
EUROPEAN RATES

George Cole and Simon Freycenet

- A resolution in Ukraine—especially one that leads to much higher defense spending in Europe—will have material implications for Bunds, in our view. Indeed, with our economists penciling in a 2pp increase in German deficits relative to their pre-German elections baseline, and given the improved forward-looking growth picture, we recently raised our end-25 10y Bund forecast to 3% (from 2.25% before). Beyond 2025, we think Bund yields can sell off further (to 3.25%) as European defense spending and bond issuance ramp up. As such, we think this theme has further to run.
- While we are confident on the direction of travel toward more European defense spending, we see risk that market expectations are disappointed by the speed of delivery, particularly this year. This uncertainty around the timing of fiscal support is also compounded by US tariff risks, which continue to weigh on Europe's cyclical outlook.

European bond issuance should ramp up over time, driving Bund yields higher

Net supply to private sector (net issuance + ECB QT), €bn



Source. Haver Analytics, Goldman Sachs GIR.

- While the magnitude of the rise in Bund yields complicates the fiscal arithmetic in other Euro area sovereigns, we see several reasons to expect sovereign risk to remain contained. First, the increase in defense spending will likely be more modest and gradual outside of the Germany. Second, higher defense spending may lead to lower spending in other areas, limiting the net impact on deficits. And third, EU-wide policymaking is mindful of such risks, which raises the prospect of common borrowing or even ECB backstop activation down the line.

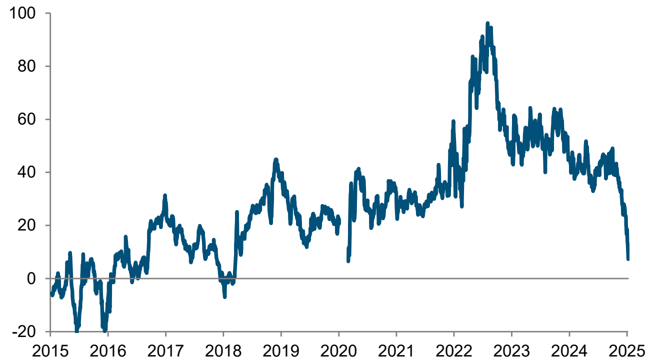
EUROPEAN CREDIT

Lotfi Karoui and Sara Grut

- For the EUR corporate bond market, the focus has been on the macro implications of a peace deal as well as the read-through from increased European defense spending. On its own, the peace deal is a positive for sentiment, as it would likely fuel a rebound in consumer and investor confidence, stronger growth, and potentially lower gas prices. The latter should especially benefit German corporate bond issuers given their greater sensitivity to the manufacturing sector.
- The read-through is more nuanced when it comes to increased defense spending. The Aerospace & Defense sector accounts for just 1% of the EUR IG market, reflecting years of underinvestment in the industry. And as our economists have noted, the initial fiscal impulse from higher defense spending will likely be weak. If anything, higher defense spending will likely lead to more tolerance for higher public deficits, which, on the margin, is negative for EUR corporate bonds.

EUR IG credit has outperformed USD IG credit this year

EUR vs. USD corporate spread differential, bp



Note: March and April 2020 data is omitted.
Source. iBoxx, Goldman Sachs GIR.

- So far, the market has taken a glass half-full approach to the recent developments, with EUR credit outperforming the USD market year-to-date. Within the EUR market, German issuers have also been outperforming the broader EUR market.

Russia, after the war

Clemens Grafe argues that an end to the Russia-Ukraine war and potential sanctions relief would lead to lower Russian growth, inflation, and rates as well as a weaker Ruble

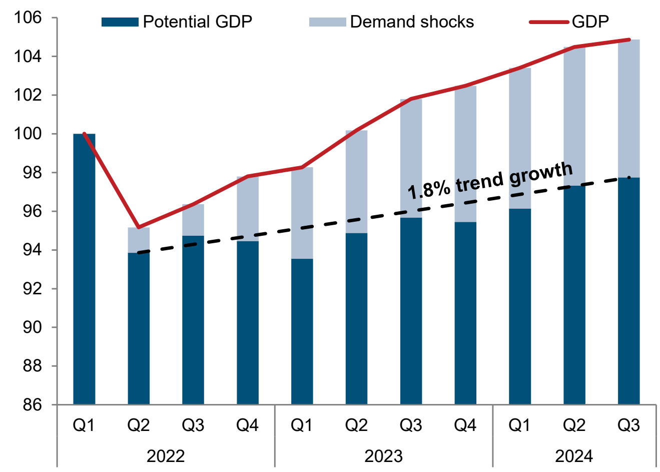
Amid increased focus on a potential resolution to the Russia-Ukraine conflict, questions have arisen as to what such a resolution—and the possible removal of Western sanctions and Russian counter-sanctions—could mean for the Russian economy and assets. We find that an end to the conflict and sanctions relief would likely lead to lower growth and inflation, a decline in rates, and a weaker Ruble.

War, but continued trend growth…

During the nearly three years from the start of the Russia-Ukraine conflict in early 2022 through to the end of 2024, Russia's economy grew at a 2.2% average annualized rate, close to the economy's estimated trend growth rate prior to the conflict. Despite ongoing trend growth, the unemployment rate fell sharply over the same time period to 2.2% from 4.1%, largely due to a nearly 6% of GDP hit to potential output. Most, if not all, of that shock owed to a steep decline in Russian export volumes following the imposition of administrative restrictions on exporting sectors. We estimate that export volumes have fallen by close to 25% since the start of the conflict (Russia stopped publishing these figures in 2022). Not all of this decline is a supply shock, since the war and sanctions increased domestic demand for previously exported products. Still, the combination of a cessation of gas exports through three of the main export pipelines (see pg. 11) and a reduction in oil production agreed to with OPEC+ accounts for around 60% of the fall in exports and a close to 4.5pp negative shock to GDP, equivalent to three-quarters of our top-down estimate of the shock.

A sharp supply shock followed by demand shocks pushed output to well above potential

Index, 1Q22=100

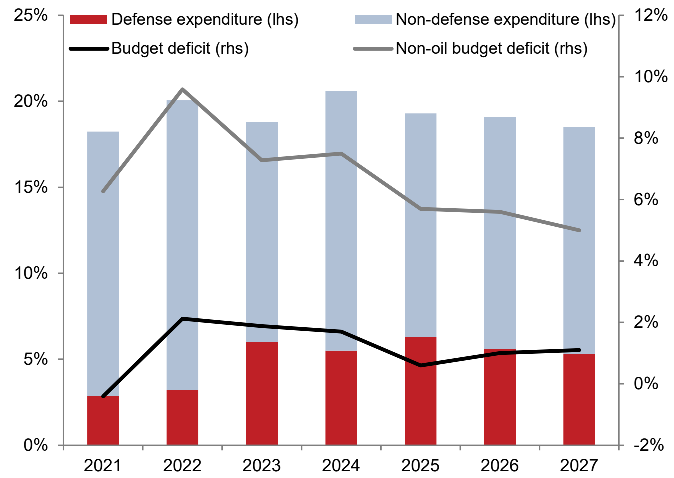


Source: Goldman Sachs GIR.

Despite the shock to exports, Russia's economy continued to grow at the previous trend rate owing to an acceleration in domestic demand to a CAGR of 3.7%—more than twice as fast as in the previous decade—mostly driven by a fiscal and quasi-fiscal boost to defense spending that has expanded the share of GDP accounted for by capital spending and government consumption by 4.8% (to 45.2% of GDP). With potential output 6% lower even as growth remained at trend, the output gap likely rose by 6% of GDP, consistent with the surge in inflation and the fall in unemployment. These admittedly bold estimates are roughly consistent with Okun's law, which consistently finds that underlying growth changes by 2pp for every 1pp change in the unemployment rate.

Defense spending as a share of GDP has doubled, requiring tightening elsewhere

% of GDP



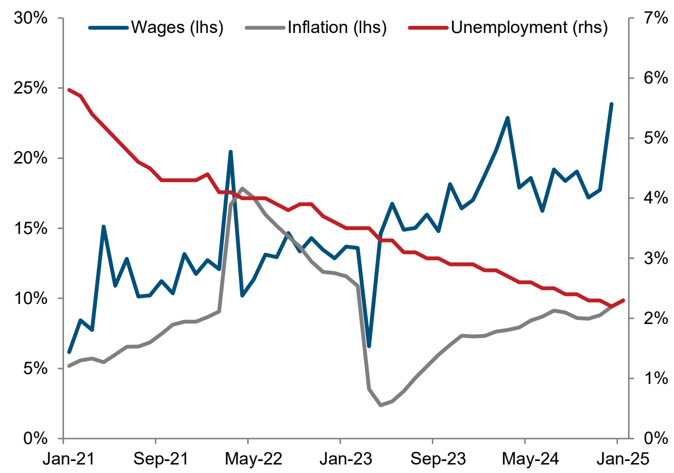
Source: Goldman Sachs GIR.

…though that is set to change

Unlike in the initial phase of the conflict, Russia's economy is now constrained by resources. The labor market is overheated, the current account surplus has shrunk from 10% to 2% of GDP, and inflation sits at close to 10%, well above the central bank's (the CBR) 4% target.

An overheated labor market has driven up wages and inflation

% change yoy (lhs), % (rhs)



Source: Goldman Sachs GIR.

As such, growth needs to slow sharply to avoid economic instability. Consequently, the CBR has raised its policy rate to 21%, equivalent to 11% in real terms. Similarly, the Ministry of Finance has ultimately been unable to maintain its initial stance that the domestic economy should remain as insulated as possible from the conflict, instead raising income tax rates and cutting social transfer payments with the aim of tightening policy by 2pp of GDP to stabilize the economy. Assuming the conflict continues, we forecast that economic growth will slow from 4% in 2024 to a below-consensus 1% this year on the back of these tighter policy measures.

Lower growth, inflation, rates, and Ruble in a ceasefire scenario…

So, what might happen in the event of a ceasefire? Cyclically, a ceasefire would likely translate into a negative demand shock and a positive labor supply shock, i.e. be contractionary and disinflationary. We think Russia would likely prioritize economic stabilization over military rearmament and would quickly reverse the 3.3% of GDP increase in defense spending since the start of the conflict. The labor supply response would likely owe to a combination of people returning from the front and from abroad. Russia's armed forces currently number around 1.3mn people, up from 1mn prior to the war. While the authorities have announced a plan for troop size to increase to 1.5mn, with sign-up bonuses baked into the 2025-27 budget plans, we think this would change in the event of a truce and the size of the armed forces would likely return close to the pre-war level. That said, the larger positive labor supply shock would likely come from the 0.5-1mn Russians who have left the country since the war began. Taken together, we think it is reasonable to assume that labor supply could increase by 1pp or slightly more in the event of an end to the conflict.

The consequent shocks to the economy would facilitate the CBR's task of returning inflation to target, likely leading rates to fall significantly faster than is currently being priced. The impact on the Ruble is less clear and would depend on the sequencing and timing of any removal of sanctions and counter-sanctions. In real terms, the Ruble trades close to its pre-conflict level despite the sharp negative supply shock to Russia's exports, partly owing to high oil prices and trapped capital. We estimate that Western-owned cash in C-accounts at the CBR—access to which is blocked unless a waiver is granted—and demand deposits in the Russian banking system total over $50bn. This implies that the Ruble would depreciate if the conditions for capital flows returned to their pre-war state. However, the latter is a big 'if', even assuming all restrictions were reversed. While trapped Western cash and the demand deposits would likely be withdrawn quickly, the Ruble's current carry is attractive, which could lead to capital inflows, though we think the former effect would dominate in the short run. This implies that the Ruble will likely remain well-supported while peace negotiations take place, but would likely start to depreciate once the restrictions are removed, assuming that the CBR doesn't intervene against sudden surges in capital flight as it has in the past.

…but longer-term growth hinges on other factors

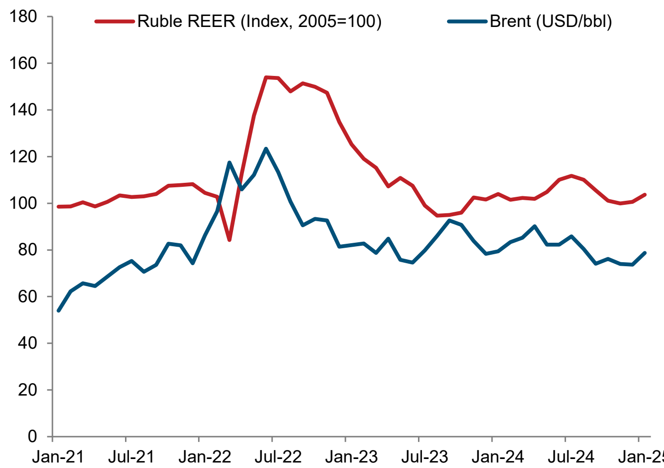
We don't subscribe to the view that Russia has become a war economy and so don't believe that the economy will go through a painful post-war adjustment period that would weigh on longer-term growth. The admittedly rudimentary data available on the value added by different sectors and industries has not shown much change since the conflict began, suggesting that most of the reallocation has occurred within sub-sectors. Sanctions also forced services and goods that were previously imported to either be substituted with domestic ones or sourced from elsewhere. Judging from the absence of extreme spikes in relative prices, which would likely materialize in a command system geared toward the war effort, Russia's economy has been free to react to market forces. It's also notable that an economist was appointed as Defense Minister.

The financial sector has been the key outlier in this story. Loans flowed disproportionately to priority sectors to fund the war effort, suggesting that asset quality could decline once the conflict ends. Banks are also likely operating with sizable net open FX positions given that their FX assets are largely frozen while the FX deposit base is not. However, as the banking sector is predominantly state-owned and the sovereign balance sheet is strong, we also don't believe any financial sector adjustment will be detrimental to growth.

Russia's long-term growth outlook instead hinges on what happens to energy exports and production, which is not directly linked to the negotiation of any ceasefire. Indeed, rather than the removal of sanctions that could follow a ceasefire, renewed gas exports would require one of the transit countries to agree with Russia to restart the supply while any increase in oil production would be linked to OPEC+ negotiations.

Beyond growth, a meaningful cost of the conflict and the resulting sanctions has been a sizable decline in transparency and governance structures. Russia's score in Transparency International's Corruption Perception Index (CPI) was always low, albeit reasonably stable up until 2021. Unsurprisingly, it has fallen quite sharply since. Reversing that trend will, in all likelihood, be a difficult and long process.

The Ruble's real effective exchange rate has remained stable, partly as oil prices have returned to pre-conflict levels



Source: Goldman Sachs GIR.

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Ukraine: renewal rather than rebuilding

Andrew Matheny argues that Ukraine's post-conflict future will likely be characterized by economic renewal rather than rebuilding

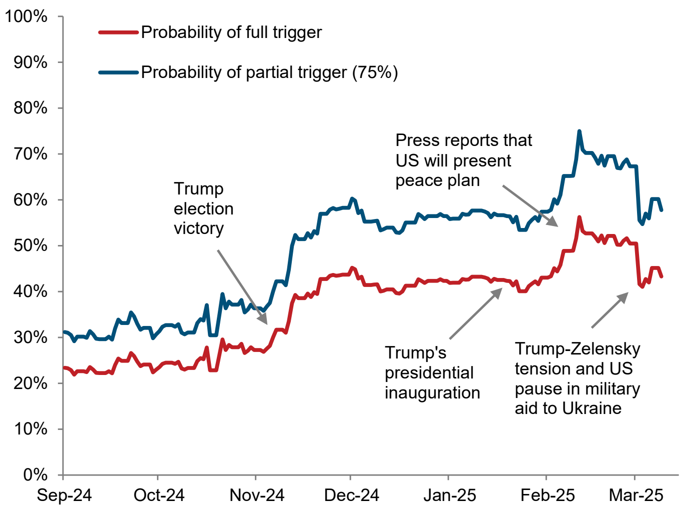
Market expectations for a peace deal in Ukraine have risen sharply since the US election, driving increased optimism about Ukraine's medium-term growth prospects. We believe that the nature and perceived credibility of any peace deal will shape Ukraine's post-war growth outlook, with the key determinants of growth in any resolution scenario likely to be the extent of reverse migration (refugees abroad returning home) and foreign-financed investment, including capital to rebuild Ukraine's economy and infrastructure. The concept of 'rebuilding' Ukraine, however, is misleading, as we think Ukraine's economy will likely undergo a structural transition away from an industrial commodities base toward a more service-oriented and innovation-driven model. As such, Ukraine's post-war future will likely be a story of economic renewal rather than reconstruction.

Rising hopes for a peace deal…

Rising market expectations for a peace deal have driven a sharp increase in optimism about Ukraine's medium-term growth prospects, as evidenced by the pricing of Ukrainian GDP-linked contingent bonds, whose payouts depend on the country generating around 4.7% annual average growth over the next four years. Using bond prices, we estimate that the market-implied probability of Ukraine achieving such growth currently stands at around 44%. While this is down from a peak of 50-55% in February, it is still double the 20% odds prior to the US election. Given that Ukraine can plausibly only achieve such an economic recovery in the event of a near-term and lasting peace deal, this implies that the market-implied probability of such a deal has risen sharply.

The market-implied probability of a sharp rise in Ukrainian GDP has increased significantly since the US election

Market-implied probability, %



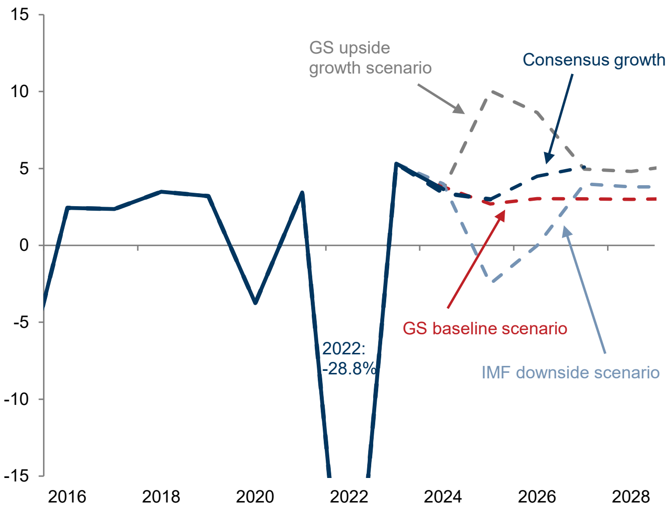
Note: For details about the calculation of this probability, see CEEMEA Economics Analyst: Ukraine — Rising Market Expectations for a Peace Deal
Source: Goldman Sachs GIR.

…but all peace deals are not equal

However, not all peace deals are created equal, with the range of possible outcomes spanning from a limited armistice to a robust and comprehensive peace treaty. The timing, durability, and perceived credibility of any potential deal will also influence economic actors and their decisions. The economic ramifications for Ukraine of a potential resolution to the ongoing war therefore remain uncertain. We estimate a 8-10% 'peace dividend' followed by 5% trend growth in the case of a credible and comprehensive peace deal (e.g., one that includes robust security guarantees), and a 5-6% 'peace dividend' and 3% trend growth in our baseline scenario of a more limited and less credible resolution to the war (e.g., a loose ceasefire), which is more bearish than consensus expectations.

A wide range of potential growth outcomes

% yoy



Source: IMF, NBU, Goldman Sachs GIR.

Post-war growth will be shaped by reverse migration and foreign investment…

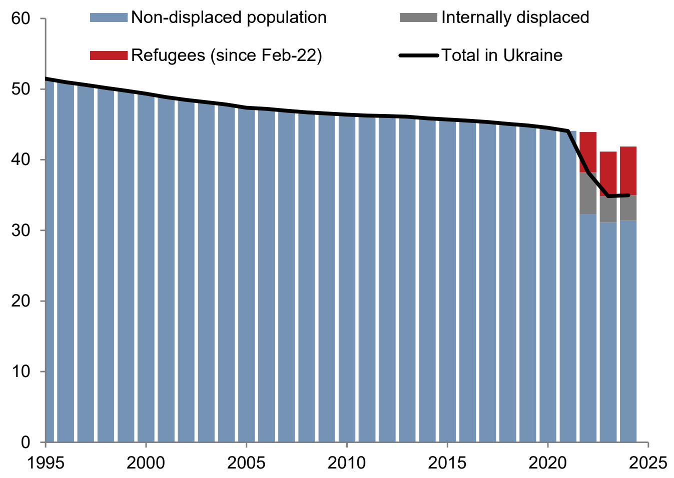
The nature of any peace deal is important because it will affect the willingness of Ukrainians abroad to return home as well as the attractiveness and perceived risk of investment opportunities, both of which will significantly influence Ukraine's post-war economic trajectory.

Ukraine's demographic backdrop has been challenging for some time, with an aging population and lower birth rates than elsewhere in Europe as well as considerable outward migration since the war with Russia first began in 2014. The resulting labor shortages were a key factor that held back Ukraine's economic growth in the 2016-19 period, when growth sat in a 2-3% range following a 16% collapse in output in 2014-15 on the back of Russia's annexation of Crimea.

The outflow of refugees since Russia's full-scale invasion (6.9mn refugees abroad according to UN estimates), the increase in internally displaced persons on account of the war (3.6mn, according to IOM estimates), and military conscription (1mn, according to press reports) have exacerbated labor shortages, contributing to a 25% decline in the country's labor force according to the NBU's estimates. Apart from the war itself, businesses have identified these shortages as the most pressing economic constraint they've faced in recent years. Our analysis suggests that reverse migration—the return of refugees abroad—will be the key determinant of any post-war 'peace dividend' boosting growth following a resolution, with surveys suggesting that as many as 20-40% of refugees abroad may return home (although net migration would likely be lower). How many conscripts return from the front and rejoin the labor force will also be a significant factor.

Major labor supply shortages hold back Ukrainian growth

Millions of people



Source: UNHCR, IOM, Goldman Sachs GIR.

Foreign-financed investment, partly to rebuild Ukraine's capital stock, is instead likely to be the key medium-term driver of growth. Damage to the capital stock has been extensive—an 18% net decline, on the NBU's estimates—even if over half of this damage relates to occupied territories. We estimate that US$40-50bn of the capital stock in unoccupied Ukraine has been destroyed, though much of this damage relates either to areas close to the frontline (e.g., housing stock, infrastructure) or to heavy industry that is no longer economically viable given the loss of cheap feedstocks for processing industries (e.g., fertilizers and steel production) and that the machinery sector would need to be fully retooled to integrate with Western supply chains.

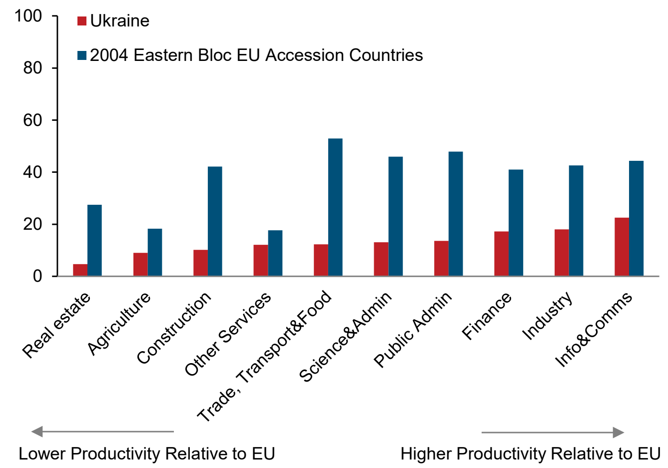
...but this investment will drive structural economic change rather than reconstruction

However, 'rebuilding' Ukraine is a misnomer: post-war investment should instead be thought of as driving a structural transition to a new economic model for the country. Much of the vast damage to Ukraine's capital stock probably won't be rebuilt, the economy will likely shift from its industrial commodities base to a more services-oriented model, and greater economic integration with the EU will drive structural change and productivity growth. We view sectors such as agriculture/agro-industry, defense, and technology as the likely bright spots and future drivers of Ukraine's growth, even if labor supply issues remain a key constraint on growth.

In this sense, the historical template is not the Marshall Plan, but more akin to German reunification—where capital flowed east and labor flowed west—or to the economic transitions that took place in former Eastern bloc countries across Europe in the 1990s and 2000s, especially given Ukraine's EU candidate status and the foreign-financed post-war economic transformation that we expect to take place. We therefore look to the investment-driven growth that took place in EU accession countries in central and eastern Europe to estimate the investment that may be required for Ukraine to achieve its transition over the medium term. Consistent with those historical examples, we assume a 5-10pp increase in the investment/GDP ratio across our baseline and upside scenarios, which would translate into US$10-20bn of annual investment flows that total US$140 (baseline) to US$320bn (upside) over a decade. It is important to note, however, that even if the bulk of investment is (at least initially) driven by the public sector, it will nonetheless remain sensitive to the nature and credibility of whatever peace deal is reached and the associated political and security risks. As such, the ability to secure a lasting peace deal is vital for Ukraine's future.

Greater economic integration with the EU should lead Ukraine's productivity growth higher

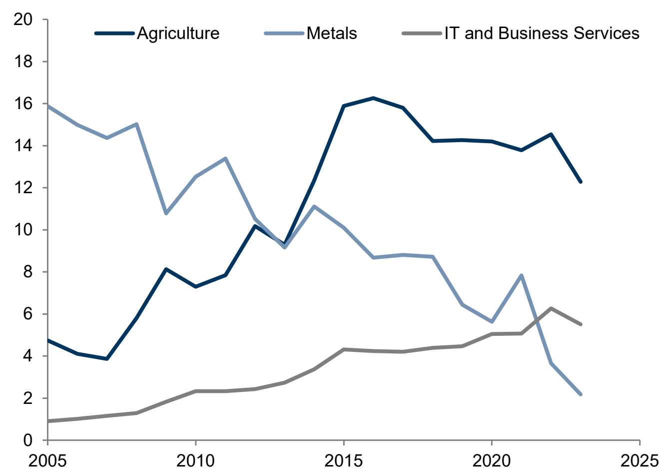
Output/worker by sector, % of EU average



Source: Haver Analytics, Goldman Sachs GIR.

Agro-industry and technology will likely drive Ukraine's growth ahead as the economy shifts further from industrial commodities

Export share of GDP



Source: Haver Analytics, Eurostat, Goldman Sachs GIR.

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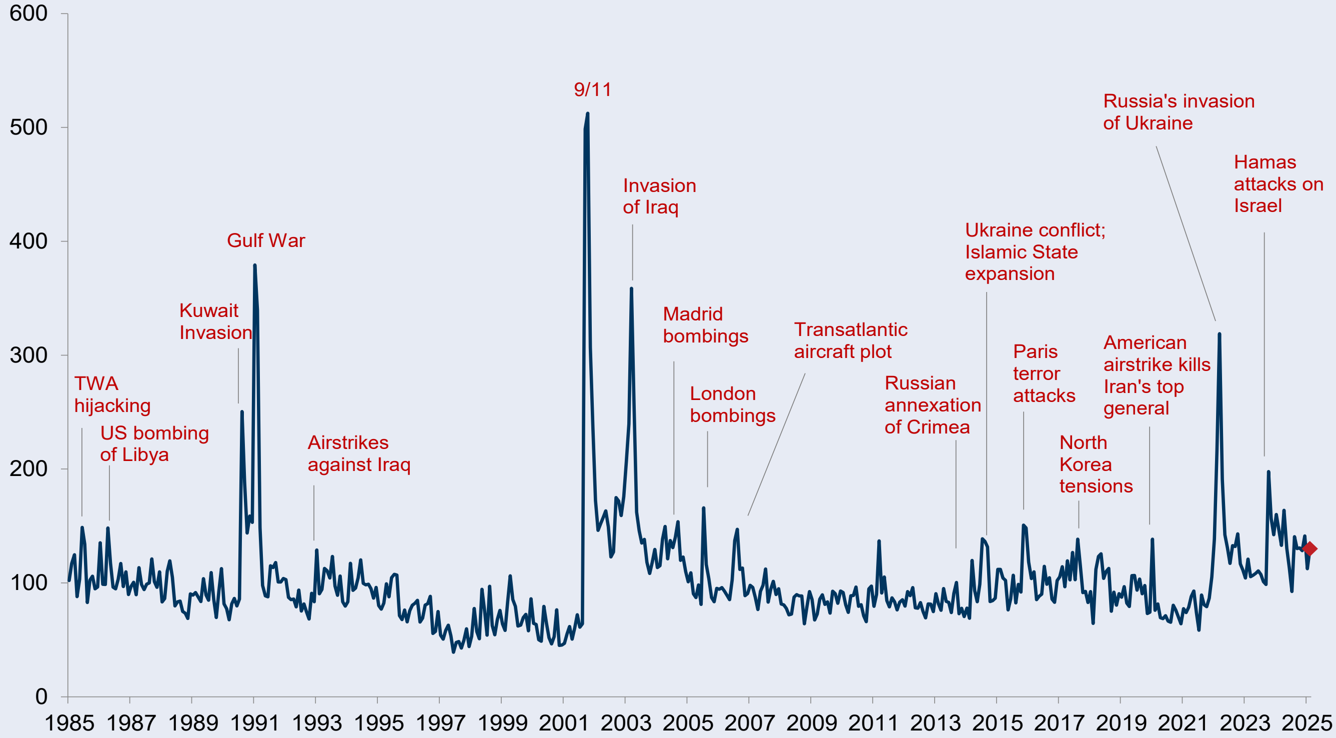
Geopolitical risk through the years

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.

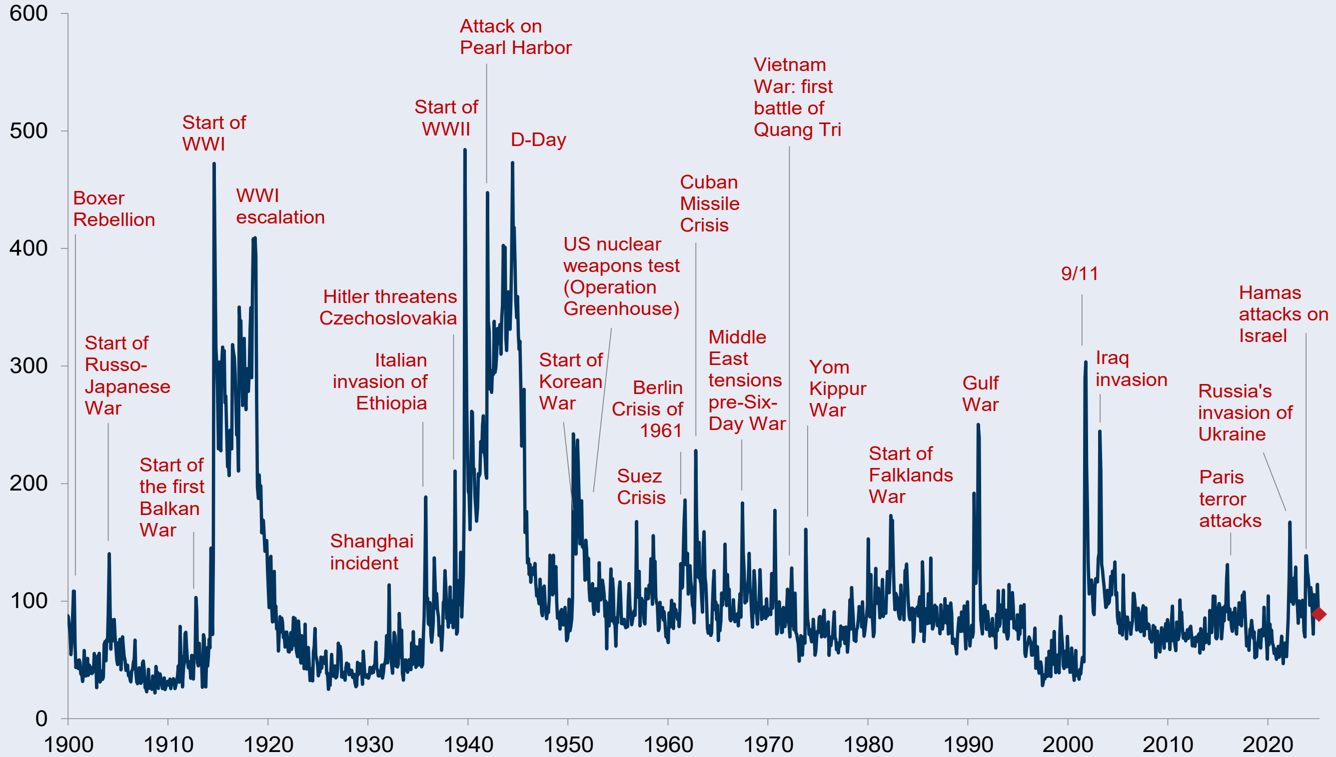
1985-Present

Geopolitical Risk Index, 1900-2019=100



1900-Present

Geopolitical Risk Index, 1985-2019=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 implies a measure of geopolitical risk as covered by the Anglo-Saxon press. See here for more information.

Source: Dario Caldara and Matteo Iacoviello, Federal Reserve Board, Goldman Sachs GIR.

Summary of our key forecasts

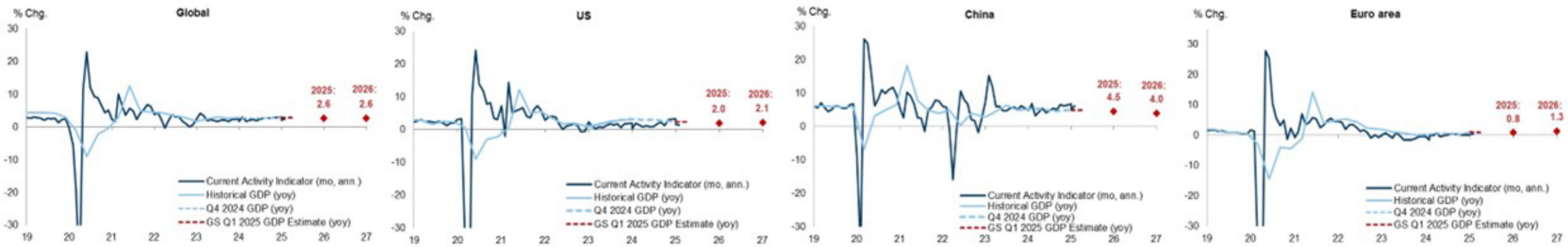
GS GIR: Macro at a glance

Watching

- **Globally,** we expect real GDP growth of 2.6% yoy in 2025, reflecting continued real disposable household income growth but headwinds from higher US tariffs. We expect global core inflation to fall slightly to 2.6% yoy by end-2025 on the back of a further decline in shelter inflation and steady wage disinflation but a boost from US tariffs, before converging toward target across most DMs by end-2026.
- **In the US,** we expect real GDP growth to slow to a below-consensus 1.7% yoy in 2025 on a Q4/Q4 basis as higher US tariffs weigh on disposable income, consumer spending, and business investment as well as tighten financial conditions. We expect core PCE inflation to rise to around 3% yoy by end-2025 as a boost from higher tariffs more than offsets disinflation from rebalancing in the auto and housing rental markets. We expect the unemployment rate to rise slightly to 4.2% by end-2025.
- **We expect the Fed** to deliver two 25bp cuts this year, in June and December, followed by another 25bp cut next year to a terminal rate range of 3.5-3.75%. On balance sheet policy, we expect the Fed to slow the pace of balance sheet runoff in May and to end runoff at the end of Q3.
- **In the Euro area,** we expect below-consensus real GDP growth of 0.8% yoy in 2025, reflecting continued manufacturing headwinds, higher US tariffs, as well as higher trade policy uncertainty, although we expect growth to improve further out as Europe scales up its defense spending and Germany increases infrastructure investment, for real GDP growth of 1.3% in 2026. We expect core inflation to return to 2% sustainably by end-2025 amid a further cooling in services inflation, although we expect headline inflation to remain slightly above target for the entirety of 2025.
- **We expect the ECB** to continue delivering sequential 25bp cuts until the policy rate reaches 2.0% in June 2025.
- **In China,** we expect real GDP growth to slow to 4.5% yoy in 2025 as the significant step-up in policy easing measures only partially offsets weak domestic consumption, the ongoing property market downturn, and higher US tariffs. Over the longer term, we remain cautious on China's growth outlook given several structural challenges, including deteriorating demographics, a multi-year debt deleveraging trend, and global supply chain de-risking.
- **WATCH US POLICY AND GEOPOLITICAL DEVELOPMENTS.** Uncertainty about US policy remains high, and higher tariffs than we currently assume would have more significant US growth and inflation impacts, with significant growth drags outside the US as well. Geopolitical developments also remain important to watch as the conflict in the Middle East continues, US-China relations remain fraught, and a potential resolution to the Russia-Ukraine war remains highly uncertain.

Goldman Sachs Global Investment Research.

Growth



Source: Haver Analytics, 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 (%)	2025 GS (Q4/Q4)	2025 Cons. (Q4/Q4)	2025 GS (CY)	2025 Cons. (CY)	2026 GS (CY)	2026 Cons. (CY)
Global	2.2	--	2.6	2.6	2.6	2.6
US	1.7	2.0	2.0	2.3	2.1	2.0
China	3.9	4.1	4.5	4.5	4.0	4.2
Euro area	0.8	1.0	0.8	0.9	1.3	1.3

Policy rates (%)	2025 GS	2025 Mkt.	2026 GS	2026 Mkt.
US	3.88	3.44	3.63	3.54
Euro area	2.00	2.18	2.00	2.41
China	1.10	1.26	0.90	--
Japan	0.75	1.11	1.25	1.15

Markets

Interest rates 10Yr (%)	Last	E2025	E2026
US	4.32	4.35	4.45
Germany	2.89	3.00	3.25
Japan	1.52	1.60	2.00
UK	4.68	4.25	4.25

Commodities	Last	3m	12m
Crude Oil, Brent ($/bbl)	71	80	76
Nat Gas, NYMEX ($/mmBtu)	4.08	3.50	4.15
Nat Gas, TTF (EUR/MWh)	42.06	50	36
Copper ($/mt)	9,752	9,600	10,700
Gold ($/troy oz)	2,925	2,930	3,160

FX	Last	3m	12m
EUR/$	1.09	1.02	0.99
GBP/$	1.30	1.26	1.22
$/JPY	148	154	156
$/CNY	7.22	7.30	7.40

Credit (bp)		Last	2Q25	4Q25
USD	IG	94	110	115
	HY	313	380	400
EUR	IG	97	105	105
	HY	300	345	355

Equities

S&P 500	E2025 GS	E2025 Cons.	E2026 GS	E2026 Cons.
Price	6,200			
EPS	$262	$270	$280	$309
Growth	7%	10%	7%	14%

Returns (%)	12m	YTD	E2025 P/E
S&P 500	--*	-4.8	21x
MXAPJ	10	2.0	13.9x
Topix	15	-3.2	14.6x
STOXX 600	7	6.6	14.1x

Consumer	2025 CPI (%, yoy)	2025 Unemp. Rate	2026 CPI (%, yoy)	2026 Unemp. Rate
US	3.1	4.2	2.6	4.1
Euro area	2.4	6.5	2.0	6.6
China	0.4	--	1.4	--

Wage Tracker 2025 (%)	Q1	Q2	Q3	Q4
US	3.8	--	--	--
Euro area	--	--	--	--
China	--	--	--	--

** No published 12m forecast. YE 2025 S&P 500 target equals 6200 (+11%).*
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 March 12, 2025

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.

Dynamic Equilibrium Exchange Rates (DEER)

The GSDEER framework establishes an equilibrium (or "fair") value of the real exchange rate based on relative productivity and terms-of-trade differentials.

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.

Financial Conditions Index (FCI)

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.

Macro-Data Assessment Platform (MAP)

GS MAP scores facilitate rapid interpretation of new data releases for economic indicators worldwide. MAP summarizes the importance of a specific data release (i.e., its historical correlation with GDP) and the degree of surprise relative to the consensus forecast. The sign on the degree of surprise characterizes underperformance with a negative number and outperformance with a positive number. Each of these two components is ranked on a scale from 0 to 5, with the MAP score being the product of the two, i.e., from -25 to +25. For example, a MAP score of +20 (5;+4) would indicate that the data has a very high correlation to GDP (5) and that it came out well above consensus expectations (+4), for a total MAP value of +20.

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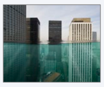

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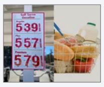

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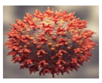

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Disclosure Appendix

Reg AC

We, Allison Nathan, Jenny Grimberg, Ashley Rhodes, Samantha Dart, Clemens Grafe, Andrew Matheny, Sven Jari Stehn, and Filippo Taddei, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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