ORF OBSERVER RESEARCH FOUNDATION

Volume 9 | MARCH 2025

Raisina Files 2025

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The Reckoning

Regression or Renaissance?

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Attribution: Samir Saran and Vinia Mukherjee, *The Reckoning: Regression or Renaissance?,* March 2025, Observer Research Foundation.

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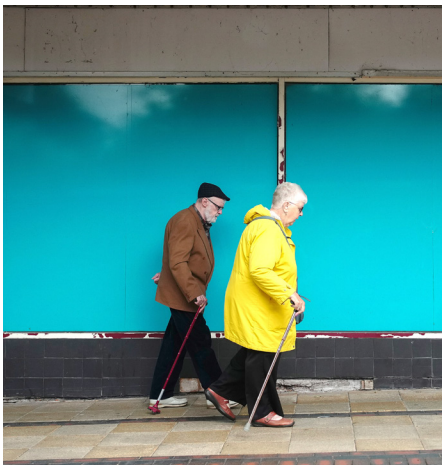
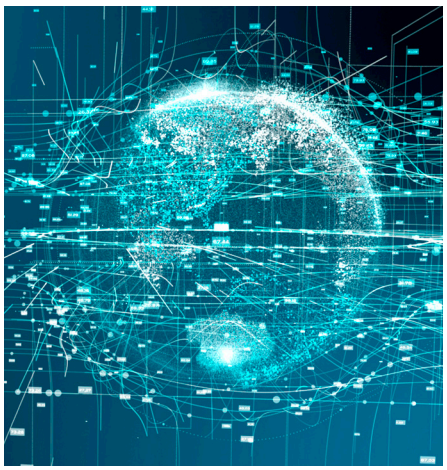
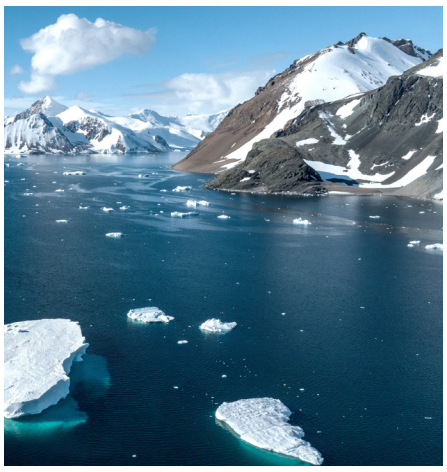
Design: PurpleBlue House and Rahil Miya Shaikh
Layout: Rahil Miya Shaikh and Shambhavi Deolekar
Assistant Editors: Aswathy Gopinath and Monika Ahlawat

ISBN: 978-93-49061-05-7
ISBN Digital: 978-93-49061-07-1





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Editors' Note

“later that night
i held an atlas in my lap
ran my fingers across the whole world
and whispered
where does it hurt?

it answered
everywhere
everywhere
everywhere.”

~ Warsan Shire

That there can be no peace without development is a universal truism. The two, perhaps the loftiest and noblest of human aspirations, are perpetually interdependent: Conflict impedes progress; and the lack of economic opportunity can contribute to conflict. Today, as humanity's excesses wage a war on the planet—causing extreme weather events, food insecurity, threats to health, and massive displacements—both peace and development will be the casualties unless we turn around.

The Reckoning: Regression or Renaissance? confronts the many obstacles that come in the way of our pursuit of peace, progress, and sustainable development, and offers insights into our choices. It is indeed a moment of reckoning, and this collection of essays engages with the debates that are crucial to the decisions that we will have to make.

As if climate change has not been enough to bring the world to its precarious state, there is more. There is still no end in sight to either the war in Ukraine or the conflict in Yemen, and tensions continue to simmer in the Middle East and Indo-Pacific. The COVID-19 pandemic caused the biggest setback in poverty reduction in decades, economic inequities persist in many places, and demographic shifts and ageing populations are giving birth to even newer challenges.

Genevieve Donnellon-May sets her sights on the Pacific, which is facing the dual challenge of navigating great-power competition and addressing pressing domestic concerns. Ensuring economic development, security cooperation, and environmental sustainability will be keys to peacebuilding in the region.

If peace is the aim, one region that has long been haunted by its absence is Africa. **Davis Makori** reminds us not just of this fact—that, following a brief period of optimism, armed conflict continues to be the scourge of the continent—but more importantly, that it is the civilians who bear the brunt of the constant state of war. The imperatives for Africa are early-warning systems, community-focused protection mechanisms, and UN reform to address the fundamental imbalance in the global peace and security architecture.

Europe is another theatre of conflict, and the domestic nostalgia for a glorious era of peace and prosperity, now lost, has become more intense. **Velina Tchakarova** lists a litany of challenges impeding Europe's rediscovering of its old self: declining birth rates and an ageing population; dependency on other countries for energy supply; and growing security threats.

Agatha Kratz tackles the subject of Europe too, this time in the context of its relationship with China. Brussels and other member state capitals are showing a "newfound activism" against China, including launching trade defence cases and tightening investment rules. In the coming days, while EU-China relations could stabilise, there will still be no meaningful change in bilateral ties.

Kate O'Shaughnessy, in her piece, writes about the Indian Ocean region and how it looks much more unstable than it did only a decade ago. For the international community to engage meaningfully in the region and create an impact, it must include the voices of island states and address the issues that matter most to them—climate change, maritime domain awareness, regional economic integration, and human capacity building.

Listening to what small and developing states have to say will be critical, because in many ways, the Global South will be the fulcrum of change.

In global governance of healthcare, for example, the year opened with pivotal shifts as the United States withdrew from the World Health Organization, provoking uncertainty about global health security, disease control efforts, climate resilience programmes, and pandemic preparedness. **Ayoade Alakija,** however, in her essay, sees the opportunity: the disproportionate power the US is ceding may now be re-distributed, and emerging economies of the Global South should increase their agency and autonomy.

The Global South will also need to step up in the area of international trade, where South-South cooperation can help these countries compete on equal footing with the Global North. For **Kekeli Ahiable,** expanding access to markets will create growth that in turn can pull over 700 million people in developing economies out of extreme poverty.

Part of the trade imperative for the Global South is to gain access to low-carbon technologies to accelerate the energy transition—a task that is complex, as **Lydia Powell** writes. Efforts to nurture a low-carbon future must balance the emphasis on mitigation with the adaptation needs of the Global South, while considering their right to human well-being, often neglected in North-led prescriptions for climate change.

Mannat Jaspal also examines themes around energy transitions, and writes that, while the proportion of fossil fuels in the energy mix will decline, they will not disappear entirely even in net-zero scenarios. A key to decarbonising is technology—and there's the rub: The gap between the required deployment of low-carbon technologies and current patterns is significant, and of the technologies that need to be deployed by 2050, the best results so far are primarily in less complex and more commercially viable applications.

Technology is also key in the domain of quantum research, the subject of a contribution by **Linda Nhon and Andreas Kuehn,** written in the context of the race between the United States and China. As the new Trump administration prepares to define policies that will shape the US science and technology leadership trajectory in the next four years and beyond, it needs a clear vision of how the country can reach quantum superiority.

Technological imperatives are similarly present in the domain of Artificial Intelligence (AI), the subject of an exposition by **Trisha Ray.** She notes that building and deploying AI at scale requires capital, infrastructure, and manpower that right now, only highly centralised entities like tech giants and rich governments can marshal. She gives us four models for how states will likely nurture 'sovereign AI', or AI that uses a country's own resources.

While the subjects of quantum computing and AI may be relatively new, what we have been tackling for some years now are the challenges posed by the proliferation of social media and its use for malicious activities. **Anulekha Nandi and Anirban Sarma** discuss the perpetual dilemma in the governance of social media—once not too long ago heralded as the 'public sphere' ideal: finding the sweet spot between free speech and security.

This same dilemma finds its place in the gargantuan task of counterterrorism. **Naureen Chowdhury Fink,** in her essay, explores the intersection of technology, gender, and counterterrorism. She uses the case of ISIS and how it used gendered narratives in its search for legitimacy during the years of building its 'caliphate', and underlines the importance of considering this nexus when crafting sustainable and effective prevention and response strategies.

Two other geographies that we cover in this volume are Latin America and the Arctic. **Dawisson Belém Lopes** writes that even as China's economic footprint may be expanding across Latin America, US hegemony remains palpable. More importantly, however, countries in the region are navigating the US-China power struggle "with pragmatic ambivalence" while maintaining their diplomatic approach.

And what of the so-called "great game" in the Arctic—home to vast reserves of energy sources and rare-earth minerals as well as important trade routes? **Alexander Sergunin and Valery Konyshev** surmise that the Arctic players, motivated by their common interests, will likely work to resolve their tensions not by force but through negotiations and arbitration.

We close the journal with the question of how we can have meaningful reforms in current international financial institutions. **Karim El Aynaoui, Hinh T. Dinh, and Akram Zaoui** argue that what is needed is a "paradigm shift" in the relationship between these institutions and developing countries. Rather than relying primarily on international assistance, developing nations should leverage technical expertise to mobilise private capital—both foreign and domestic—for development. In turn, IFIs must prioritise technical assistance, institution-building, and private capital mobilisation to help countries achieve sustainable and resilient growth.

Each of the 16 essays in this volume gives us enough to mull on where we want to head next. The reckoning will not just be about who gets to mine the Terbium in the Kvanefjeld plateau of Greenland, or whether or not China succeeds in claiming the Scarborough Shoal. It is about entire island states that will disappear; the millions in Africa who have been dependent on UN humanitarian assistance for 20 years. Our sound judgement is being called upon not just for the 'great games' but for the every single day: Do we keep hurting and wither, or do we create a new era?

Reimagining Peace-Making in the Pacific

Genevieve Donnellon-May

The Pacific Ocean, often considered a vast expanse of tranquil waters, is a region at the crossroads of global geopolitics, environmental challenges, and cultural diplomacy. The region comprises Australia, New Zealand, and 14 island nations—the Cook Islands, the Federated States of Micronesia, the Independent State of Papua New Guinea, the Independent State of Samoa, the Kingdom of Tonga, Niue, the Republic of Fiji, the Republic of Kiribati, the Republic of the Marshall Islands, the Republic of Nauru, the Republic of Palau, the Republic of Vanuatu, the Solomon Islands, and Tuvalu—and is endowed with rich natural resources and extraordinary linguistic and cultural diversity. It is also among the world's most strategically significant areas, harbouring a delicate balance between burgeoning economic opportunities, rising geopolitical tensions, and the existential threats posed by climate change.

As the region recovers from a period of sharp economic contraction due in part to the COVID-19 pandemic, many Pacific countries are confronting challenges in reinvigorating growth.[1] They remain vulnerable to climate, health, and economic shocks that are driving supply chain shortages, inflation, and stifled development. At a time when great powers vie for influence and island nations face unprecedented environmental risks, the pursuit of peace in the Pacific has never been more urgent.

This essay argues that lasting peace in the Pacific requires a multifaceted approach—one that promotes cooperation, mitigates conflict, and addresses both traditional and non-traditional security challenges. As the Pacific's role on the global stage continues to expand, securing its lasting peace is not just the responsibility of its island nations but of the entire international community.

Geopolitical Tensions and Growing Militarisation

The Pacific region has become a focal point of geopolitical competition, particularly in the context of the United States (US)-China rivalry. The two global powers are vying for influence, with Pacific islands serving as critical locations for military bases, economic corridors, and strategic shipping lanes.[2]

The US has long viewed the Pacific as vital to its strategic interests, focusing on securing shipping routes and military positioning. In particular, the South Pacific[a] has long been seen as the US's backyard and a region where its ally Australia is the hegemon.[3] In 2022, the US announced the US-Pacific Partnership Strategy, a roadmap to strengthen cooperation with the Pacific guided by shared goals including climate change mitigation, nuclear non-proliferation, maritime security, and post-COVID-19 pandemic economic recovery. After having reduced aid to the Pacific in the years prior, in September 2022, then President Joe Biden

[a] In this context, the coastal 'South Pacific' countries are: Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

announced a US$810-million aid package for the Pacific Islands, spread over 10 years.[4] The US government also pledged support to the control of illegal fishing, with the US Coast Guard assisting in strengthening local capabilities, especially in Papua New Guinea (PNG).[b] An additional US$130 million was designated for climate action projects.[5]

Following this, in February 2022, the US reopened an embassy in the Solomon Islands after a 30-year absence. In the same year, the US strengthened security ties with a landmark Defence and Security Agreement. The US also pledged help in controlling illegal fishing. These efforts build on the US-Fiji Trade and Investment Treaty (TIFA) signed in 2020. The TIFA provides a strategic framework and principles for dialogue on trade and investment issues between US and Fiji authorities. Since then, Fiji has become the only Pacific Islands country to join the 14-member US economic initiative, Indo-Pacific Economic Framework (IPEF).

More recently, in September 2023, during the second US-Pacific Island Forum Summit, the Biden administration pledged to work with Congress to provide US$200 million more in funding for the Pacific Islands, for projects and activities aimed at mitigating the effects of climate change, spurring economic growth, countering illegal fishing, and improving public health.[6] In the same year, the US also signed an agreement with PNG buttressing the island state's defence capabilities and allowing for the future deployment of US troops there. Washington has also sought to expand dialogue with the region's leaders, hosting the first Pacific Leaders' Summit in 2023.[c]

Meanwhile, China's expanding presence, driven by its Belt and Road Initiative (BRI) and natural resource ambitions, has raised concerns among regional powers. While the Pacific Island region has long been important to China's geostrategic interests, Beijing has ramped up engagement with the Pacific in recent years through increased aid, development, security cooperation, and diplomacy. In doing so, Beijing aims to achieve the following interconnected goals: seeking naval access to the region, achieving diplomatic victories against Taiwan, securing fishing and seabed mining rights in the vast economic zones of the Pacific States, and also protecting the Chinese diaspora.[7] Concurrently, China has become the largest trading partner for most Pacific Island countries. More broadly, Beijing has undertaken considerable investment in and emerged as a key development partner to the Pacific within the framework of the BRI. According to official statistics from the Chinese

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[b] Illegal, unreported and unregulated (IUU) fishing is one of the biggest threats to achieving a sustainable ocean future. A 2009 study conservatively estimates that up to 26 million tonnes of fish are caught illegally each year, accounting for 1 in every 5 fish sold at market. In the Pacific islands, the figure goes as high as US$333 million yearly in IUU tuna alone. For countries such as PNG, where the fishing industry plays a crucial role in the country's economy and food security, IUU fishing is an existential threat. With a coastline stretching over 16,093 kilometres, PNG's waters cover more than 2.4 million sq km and are home to some of the most productive tuna fisheries in the world.

[c] This summit was attended by the governments of Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of the Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and the United States of America. See: https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/11/10/fact-sheet-energizing-the-u-s-pacific-islands-forum-partnership/.

government, the country has funded more than 100 aid projects, donated more than 200 batches of in-kind support, and trained about 10,000 local professionals since the 1970s.[8] The Lowy Institute Pacific Aid Map notes that China provided nearly US$3.148 billion to the Pacific between 2008 and 2020.[9]

Furthermore, China has built numerous large infrastructure projects in the Pacific, which it financed by loans.[d,10] Most of this was funded by China's primary policy banks—the Export-Import Bank of China and the China Development Bank, and they were projects that other countries or donor institutions were not able, or willing, to finance.

China has also provided generous scholarship programmes and training facilities to a number of countries in the region and established six Confucius Institutes as well. Numerous high-level diplomatic visits in the past decade or so, two of them by President Xi Jinping, have highlighted China's interest in the region. In 2022, China's security pact with the Solomon Islands,[e] which includes policing cooperation, has been viewed as a strategic encroachment; so is the February 2025 announcement that the prime minister of the Cook Islands[f] will visit Beijing to strengthen ties with China—and both have prompted heightened engagement from the US and its allies.[11]

Regional powers like Australia and New Zealand have also played pivotal roles in shaping Pacific geopolitics. Australia, historically viewing the Pacific as its "backyard", has sought to maintain leadership through initiatives like the Falepili Union with Tuvalu, granting Australia veto power over Tuvalu's security agreements in exchange for residency pathways. However, the agreement's future remains uncertain amid Tuvalu's political shifts, highlighting the fluidity of Pacific alliances.[12] In late 2024, Australia strengthened regional security ties by signing major agreements with PNG, the Solomon Islands, and Nauru.[13] Meanwhile, New Zealand has emphasised a balanced approach, advocating for regional stability while navigating its relationships with both China and the US.[14]

At the multilateral level, security arrangements like the Quad (the US, Japan, Australia, and India) and AUKUS (the US, Australia, and the UK) have further militarised the region. The prospect of nuclear-powered submarines and advanced military assets has sparked debates about an escalating arms race, raising concerns about long-term stability.[15]

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[d] For instance, looking at Chinese aid pledges to the Solomon Islands demonstrate Beijing's willingness to finance such projects. According to Zhang (2022), these include a US$53 million national sports stadium, a National University dormitory complex (US$21.4 million), a comprehensive medical centre at the National Referral Hospital, and 161 mobile phone towers (US$66 million).

[e] As Szadziewski and Smith (2023) note, in 2019, the government of Manasseh Sogavare, the then-Prime Minister of the Solomon Islands decided to "switch" diplomatic relations from Taiwan to China. Following this, in 2022, his government signed a controversial security agreement with Beijing.

[f] The Cook Islands is a self-governing country in free association with New Zealand which provides budget support and commits to defend the South Pacific nation whose people are New Zealand citizens. According to deputy prime minister of New Zealand, New Zealand had made repeated requests to the Cook Islands to share or consult on the contents of agreements that Brown plans to sign with China but had not received a proper response, raising concern. See: https://www.reuters.com/world/asia-pacific/new-zealand-concerns-mount-cook-islands-pm-plans-sign-agreement-with-china-2025-02-10/; also: http://melbourne.china-consulate.gov.cn/eng/fyrth/202502/t20250210_11552122.htm.

Domestic politics in Pacific nations add another layer of complexity. For Fiji, for example, its balancing act between China and Western powers remains precarious even as Sitiveni Rabuka has returned to power as prime minister in 2022, signalling a potential thaw in relations with Australia.[g,16] Similarly, Vanuatu's political instability has created opportunities for external powers to court traditional leaders, further entrenching geopolitical rivalries.[17]

In this volatile landscape, the Pacific islands face the dual challenge of navigating great-power competition and addressing pressing domestic issues. The region's strategic significance ensures that geopolitical tensions will remain a defining feature of its future, with implications for both local stability and global security.

Local Pressures: Sovereignty and Self-Determination

The pursuit of peace in the Pacific is further complicated by the intricate interplay of sovereignty and self-determination. A number of Pacific islands remain overseas territories of bigger states, creating political and social tensions that challenge regional stability.

New Caledonia exemplifies these struggles. Amid France's growing military presence in the Pacific,[18] the territory has faced recurring unrest over its political future. In 2023, attempts to reconcile the interests of the French government, New Caledonian loyalists, and the Kanaky independence movement reached a deadlock. France's subsequent decision to enact controversial constitutional changes—including expanding the electoral roll to include more non-Indigenous residents—further inflamed tensions. While intended to stabilise the political landscape, these measures have deepened divisions between pro-independence groups and French loyalists, consequently undermining peace efforts.[19]

Non-traditional security threats: challenges or catalysts for peace?

Pacific island nations are among the most vulnerable to environmental shifts, experiencing rising sea levels, higher temperatures, changes in rainfall patterns, ocean acidification, and greater frequency and intensity of extreme climate events.[20] In parts of the western tropical Pacific, sea level has risen by approximately 10 to 15 centimetres (4 to 6 inches), close to or nearly double the global rate measured since 1993. Meanwhile, in the tropical Pacific, sea level has risen approximately 5 to 10 cm (2 to 4 inches).[h,21] Concurrently, rising sea levels have resulted in increases in the frequency of coastal flooding since 1980. Notable

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g Former Commodore Frank Bainimarama seized power in Fiji in 2006, leading to a series of events that would eventually see Australia and New Zealand slap sanctions on him and other senior officials. The period immediately after the coup d'état saw heavy-handed media censorship and frequent attacks on his political opponents. At one point, police in Fiji accused Australia and New Zealand of being involved in an alleged plot to assassinate Bainimarama, a claim both countries denied. See: https://www.abc.net.au/news/2019-09-15/frank-bainimaramas-journey-from-coup-leader-to-climate-crusader/11500186. In October 2023, Australia and Fiji signed the Fiji-Australia Vuvale Partnership, building on the previous partnership signed in 2019. It is a broad-ranging and comprehensive partnership supporting deeper people-to-people, economic and security links.

h In comparison, the average global mean sea level rise increased by around 3.4 millimetres during the same period. See: https://www.wmo.int/press-release/climate-change-transforms-pacific-islands.

increases include Guam, from two to 22 times a year; Penrhyn, Cook Islands from five to 43 times a year; Majuro, Republic of the Marshall Islands from two to 20 times a year; Papeete, French Polynesia from five to 34 times a year; and Pago Pago, American Samoa from zero to 102 times a year.[22]

These environmental shifts threaten not only the physical survival of island nations but also their socio-economic stability, creating ripple effects beyond national borders. Rising sea levels and natural disasters are eroding arable land, displacing communities, and destroying infrastructure. Pacific island nations, which already struggle with limited resources and infrastructure, are facing the loss of arable land, homes, and entire communities, as well as loss of spiritual and cultural connections to their land.[i,23] Studies suggest that these countries may become uninhabitable by 2100, thereby leaving 600,000 stateless climate refugees.[24]

The consequences extend beyond physical displacement, threatening water security, food systems, and livelihoods. Rising ocean temperatures are disrupting traditional fishing practices—a cornerstone of many Pacific island economies. Freshwater supplies are also under siege, with saltwater intrusion forcing communities in Kiribati to rely on imported bottled water. These pressures disproportionately affect marginalised groups, including women, indigenous communities, and rural populations, exacerbating social and economic inequalities.[25] There is significant economic cost too. Notably, in 2015, Vanuatu lost 70 percent of its gross domestic product (GDP) due to Cyclone Pam. The country has since lost another 12 percent of its GDP in subsequent cyclones.[26]

Climate change also acts as a threat multiplier, undermining regional peace and stability. Displacement due to sea-level rise and extreme weather risks sparking disputes over land rights and resettlement. Competition over dwindling resources, such as fish stocks and freshwater, could further fuel social unrest and interstate tensions.

Indeed, the nexus between environmental instability and the potential for conflict is undeniable, necessitating a paradigm shift in how peacebuilding efforts are conceptualised and implemented. As climate-related challenges intensify, traditional security frameworks must evolve to incorporate environmental dimensions as a core component of regional stability. This requires integrating climate resilience into peacebuilding initiatives, ensuring that economic development, security cooperation, and environmental sustainability are addressed in tandem. Regional mechanisms like the Pacific Islands Forum must prioritise climate adaptation and migration management, while international partnerships with entities like the Quad and the European Union (EU) can provide technical and financial support. Without addressing the root causes of environmental instability—such as rising sea levels, resource scarcity, and extreme weather events—peace efforts in the Pacific will remain incomplete and unsustainable.

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[i] Some 67 percent of all infrastructure in Pacific Island countries lie within a mere 500 metres of the coast, making them highly susceptible to climate change impacts. The situation is particularly dire for the Maldives, Tuvalu, the Marshall Islands, Nauru, and Kiribati. See: https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-15/.

Building resilience demands a multi-layered approach, combining local, national, and regional efforts. Empowering communities through capacity-building and participatory decision-making is critical, as is strengthening regional cooperation to tackle transboundary challenges. Only through inclusive and collaborative strategies can the Pacific navigate the complex interplay of environmental and security threats, securing a stable and peaceful future.

Addressing New Challenges: A Collaborative Path Forward

Communities in the Pacific urgently require support to adapt to the mounting risks posed by environmental disasters, which threaten their well-being, livelihoods, and critical infrastructure. Geographic isolation and economic vulnerabilities, such as reliance on remittances and foreign aid, exacerbate these challenges, underscoring the need for innovative and collaborative policy responses tailored to the region's unique needs.

Regional efforts are critical in addressing the complex challenges. At the 52nd Pacific Islands Forum Leaders meeting in November 2023, leaders endorsed the Pacific Regional Framework on Climate Mobility, a landmark initiative designed to guide governments, communities, and international partners in managing climate-related displacement.[27] The framework emphasises the importance of safeguarding the rights and dignity of individuals—whether they choose to remain in place, relocate voluntarily, or are forced to move.[j]

These efforts highlight the Pacific's proactive stance in addressing climate mobility, even as the region grapples with limited resources and capacity. By building on these successes and fostering regional collaboration, the Pacific can continue to set an example for other vulnerable regions facing similar challenges.

In addition, Pacific leaders have reaffirmed their support for the Pacific Resilience Facility, a member-owned and -managed community financing mechanism established in 2021 to fund local climate adaptation projects.[28] To build on efforts undertaken by Australia, New Zealand, and the US,[k] like-minded partners such as Japan, India, and others could play a pivotal role in supporting the facility. For instance, Japan can contribute through its expertise in disaster-resilient infrastructure,[29] while India could leverage its capabilities in emerging technologies.[30]

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j It underscores that staying in place should remain a fundamental priority, with planned relocation—defined as the voluntary movement of communities away from high-risk areas—treated as a measure of last resort. The region has already demonstrated leadership in this area, with countries like Fiji and Vanuatu pioneering national policies on planned relocation.

k In May 2023, the Biden administration committed to providing US$2 million, subject to Congressional notification and the completion of domestic procedures, to support the PIF to design and stand up the Pacific Resilience Facility (PRF) to support adaptation and resilience at the local level in the Pacific Islands. See: https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/11/10/fact-sheet-energizing-the-u-s-pacific-islands-forum-partnership/.

Emerging technologies such as artificial intelligence (AI)-driven climate monitoring and forecasting systems could be deployed to enhance early warning systems and improve disaster preparedness. Such collaborations would not only strengthen the facility's operational capacity but also foster innovation in addressing climate-related risks.

Stronger inter-regional Indo-Pacific efforts are also essential to address the shared challenges of climate security. Regional organisations in the Pacific and the broader Indo-Pacific could establish a joint Climate Change Working Group to coordinate responses to climate change-induced threats. Institutions such as the Association of Southeast Asian Nations (ASEAN) and the Indian Ocean Rim Association (IORA), which have already acknowledged the growing concerns around climate change and security, could collaborate with Pacific-based organisations like the Pacific Islands Forum (PIF)[31] and the Alliance of Small Island States (AOSIS).[32] Such partnerships could facilitate knowledge-sharing, data exchange, and the implementation of pilot programmes for emerging technologies, climate modelling, and risk scenario planning. By pooling resources and expertise, these organisations could develop innovative solutions suitable to the unique vulnerabilities of the Pacific.

Furthermore, the Quad could play a critical role in advancing these initiatives. Building on existing programmes like the Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP)[l] and the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA),[33] the Quad could establish a dedicated working group to address climate security in the Pacific. As key donor countries to the region, Quad members are well-positioned to support disaster resilience, climate adaptation, and sustainable development efforts. By leveraging their collective resources and technological capabilities, the Quad could help pilot innovative programmes, such as AI-based climate monitoring systems or community-based renewable energy projects, while aligning with the priorities of Pacific Island nations.[34]

Concurrently, international and multilateral organisations, including the EU and the United Nations, could also actively engage in providing additional support. Drawing on their extensive experience in climate finance, capacity building, and sustainable development, these entities could complement regional efforts and ensure a coordinated global response to the Pacific's climate challenges. Together, these collaborative initiatives comprise a robust framework for addressing the intertwined issues of climate change and security, ensuring a more resilient and sustainable future for the Pacific.

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[l] In May 2022, the Quad countries launched Q-CHAMP with the themes of mitigation and adaptation/resilience. It is guided by the Climate Working Group's three pillars: climate ambition, clean energy, and adaptation/resilience. See: https://www.mofa.go.jp/files/100348057.pdf.

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Protecting Civilians from Armed Conflict in Africa

Davis Makori

One-third of all the armed inter- and intra-state conflicts across the world since 1946 have taken place in Africa.[1] Today, at the quarter mark of a new century and following a brief period of optimism, the scourge of armed conflict continues to haunt the continent.[2] While there was an overall reduction in armed conflict at the turn of the century, African states such as Libya, Sudan, Ethiopia, Mali, Mozambique, and numerous other countries all witnessed either a protraction or escalation of deadly conflicts in 2024.[3] The humanitarian consequences of these conflicts show that it is civilians who bear the brunt.

While wars or armed conflict between states have gradually declined, there has been a corresponding increase in non-state armed conflicts that have become more deadly.[4] These include civil wars such as in Sudan, where a power struggle between the Sudan Armed Forces (SAF) and the Rapid Support Forces (RSF) in 2023 has resulted in the fastest-growing humanitarian crisis in the world.[5] Insurgencies and counterinsurgencies have also become more catastrophic. For example, fatalities from the clashes between the Ethiopian government and the Oromo Liberation Front (OLA) and the Ethiopian government and the Tigray People's Liberation Front (TPLF) increased from 1,592 in 2020 to a staggering 8,637 in 2021.[6] Violent extremist groups have also stepped up attacks targeting civilians in the Central Sahel states of Burkina Faso, Mali, and Niger since 2023 as well as in Mozambique beginning in 2017.

These conflicts have resulted in high civilian casualties, grave human rights and international humanitarian law violations, unprecedented internal displacement and refugee crises, and endemic political instability. The devastation caused by the Sudan conflict is such that one out of every six displaced people globally is Sudanese.[7] As a further indication of the severity of the problem, Africa is also over-represented in global humanitarian appeals. The 2025 United Nations Global Humanitarian Overview lists the Central African Republic, Chad, Democratic Republic of the Congo (DRC), Somalia, and Sudan as countries suffering protracted crises, with humanitarian appeals having run consecutively for over 20 years.[8]

Lessons from Past Failures

At their core, the challenges faced by Africa in protecting civilians from armed conflict in the 21st century stem from failures to address the root causes of conflicts. Existing frameworks and instruments have also failed to establish rapid and effective protection mechanisms to shield civilians from the threat posed by armed groups. The 1994 Rwanda genocide remains the most devastating failure in civilian protection in Africa.[a] The scale of gross human rights and international humanitarian law violations experienced in Rwanda and the tumultuous aftermath of the genocide that still ripples through Central Africa highlight the precariousness of reliance on tools such as international peacekeeping. The United Nations Mission in Rwanda (UNAMIR) essentially became a spectator to genocide.[9]

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[a] Over the course of about 100 days between April and July 1994, nearly one million ethnic Tutsi and moderate Hutu were systematically targeted and killed by Hutu radical militias in Rwanda despite the presence of the United Nations.

In the enquiry into the catastrophic failure following the genocide, the UN found the enabling conditions to be stark: primarily, the lack of capacity, resources, and political will to protect civilians from predictable threats.[10] Despite earnest endeavours by the Organization of African Unity (OAU) and its successor the African Union (AU) to learn from the mistakes of 1994, echoes from the past remained, and the AU and the international community failed to prevent the recurrence of genocide in Darfur in 2003 and further, in Sudan, the endless cycle of conflict that has driven the country to the brink of state failure.[11]

In all these cases, political will is key to achieving any type of solution; "political will" is not easily defined, though, nor reached. Scholars have clarified that political will exists when a sufficient set of decision-makers who share a common understanding of a particular problem is committed to supporting a commonly perceived and potentially effective policy solution.[12] Yet in most conflicts in Africa today, the protection of civilians does not seem to be a primary concern for any of the decision-makers.

Assigning Responsibility for the Protection of Civilians in Africa

The primary responsibility for protecting civilians from armed conflict lies with the state. However, as demonstrated in Africa, the state has become increasingly involved as a party in armed conflict either in fighting insurgencies and rebellions or engaging in one-sided violence against civilians. Both states and non-state armed actors have been increasingly implicated in violations of human rights and humanitarian law. In this scenario, it is increasingly challenging, complex, or even impossible to hold the state as the primary duty bearer accountable for the protection of civilians due to the inherent conflict of interest involved.[13] States with a record of systematic human rights abuses or repression of political dissent are often reluctant, or even hostile, to attempts to hold security forces responsible for the commission of atrocities against civilians.

Accountability is further complicated by the proliferation of multiple actors in conflict theatres across the continent: militias, transnational violent extremist groups, and even private security companies that have little incentive to observe the rules of war. These non-state actors operate across Africa's diffuse state borders, blurring the lines of responsibility to and accountability for atrocities committed against civilians. The emergence of groups such as Boko Haram in the Sahel, Al-Shabaab in East Africa, and Ahlu Sunna wa Jama (ASWJ) in Mozambique in the 21st century has made the resolution of long-running conflicts near impossible.[14] These groups have been formed in the crucible of centre-periphery cleavages, often thriving in marginalised areas where the state is absent. Many states threatened by extremist groups also have a proclivity for heavy-handed military responses with often high civilian collateral damage. Addressing the threats posed by such extremist groups demands more than a securitised response. An imperative is the resolution of deep underlying grievances against the state that create conducive conditions for extremist groups to mobilise and operate, to begin with.[15]

Accountability at the regional and continental level is also complicated. Numerous African states have been credibly linked with supporting militia groups, insurgents, and other non-state armed actors with whom said states have mutual interests to wage conflict in neighbouring countries. This is best illustrated in the DRC and South Sudan which have been turned into conflict theatres: Conflicting neighbouring state interests morph into bloody proxy wars that leave civilian populations often isolated from the centre and left at the mercy of armed groups.

In such scenarios, remedies offered by frameworks such as the African Union Peace and Security Architecture (APSA)—the AU's blueprint for promotion of peace, security and stability in the continent—often fall short in preventing the escalation of armed conflict.[16] APSA is designed as a strategic framework for peace and security in Africa to encompass, among others, early warning and conflict prevention, peace-making, peace support operations, peacebuilding and post-conflict reconstruction and development, promotion of respect for human rights and humanitarian action, and disaster management. Its operationalisation is hinged on the fundamental principle of subsidiarity, where the five regional economic communities (RECs) serve as first responders to conflict situations through instruments that include diplomacy and mediation at the onset of conflicts, and peace support operations such as hybrid AU and UN peacekeeping missions—once there is a "peace" to be kept or enforced.[17]

However, the main shortcoming remains the reliance on member states to operationalise this framework and the consequent disparity in results. The Economic Community of West African States (ECOWAS), for example, has a better track record in early warning, peacebuilding, and even military intervention in The Gambia, Sierra Leone, and Liberia in the face of inaction by the international community.[18] Meanwhile, the Intergovernmental Authority on Development (IGAD) has grappled to contain the escalation of conflicts in Sudan, South Sudan, and Ethiopia. This variance has been attributed largely to the member states' investments in the two regions to empower the respective apparatus. The ECOWAS Monitoring Group (ECOMOG), formed in 1990, has intervened in multiple conflict situations; in contrast, the East Africa Standby Force (EASF) has remained dormant amidst the escalation of humanitarian situations in South Sudan, Sudan, and Ethiopia.[19]

Internationally, the lack of political will is succinctly illustrated by the chronic inability of the principal global organ for the maintenance of global peace and security, the UN Security Council (UNSC), to prioritise civilian protection over the interests of the five permanent member states, or the P5—China, France, Russia, the UK, and the United States. While this is not unique to Africa, it is a dynamic that leaves the fate of entire communities facing the threat of armed conflict—and in desperate need of concerted, rapid, and decisive interventions—to the vagaries of great-power political calculi.[20] The UN Charter endows the P5 with the power to veto any action by the UNSC, often stymieing urgently needed global action to protect civilians from armed conflict. The use of veto power by P5 member states has often delayed critical action such as the vetoing in November 2024 of a UNSC Resolution calling on Sudan's warring parties to cease hostilities and ensure delivery of humanitarian aid.[21]

Which Way Forward?

Investing in Conflict Early Warning Systems

The natural starting point for ensuring that civilians are protected from armed conflict in Africa, as with anywhere else in the world, should be investing in early warning mechanisms and conflict prevention. Most grave human rights and humanitarian law violations against civilians are not an inescapable reality but are likely predictable, at best preventable, and at worst, mitigatable. Frameworks such as APSA should leverage technological advancements to improve conflict early warning systems and invest in capabilities to independently monitor conflict situations before they evolve into humanitarian catastrophes. While technology is a double-edged sword, as seen in the use of social media to spread hate speech and disinformation that only accelerate violence, there have also been promising initiatives to use these tools to monitor and predict the outbreak of violence. An example is the innovative use of platforms such as *Ushahidi* as part of IGAD's Conflict Early Warning and Response Mechanism around key events such as elections that are likely to be triggers for armed conflict.[22] Linking early warning systems to both hard and soft conflict prevention and management tools such as preventive diplomacy, security force deployment, and anticipatory humanitarian action is critical to mitigating the potential impact of conflict events.

Community-Focused Protection Mechanisms

The upsurge in violence and flagrant violations of human rights and humanitarian law across the continent also highlights the dearth of community-focused and conflict-sensitive civilian protection mechanisms that can provide the last line of defence against armed groups. While there has been progress in the evolution of conflict prevention and management frameworks such as APSA, the safety and security of communities vulnerable to armed conflict remains inextricably linked to the willingness of states to prioritise civilian protection in conflict situations.[23]

A familiar pattern is the African Union Peace and Security Council's (AUPSC) preference for diplomacy and mediation at the onset of hostilities between a government and non-state armed groups such as rebels even as the warring parties commit atrocities against civilians. This poses a conundrum over whether the firmly established principles of sovereignty and non-interference in internal state affairs take precedence over the protection that civilians are entitled to under humanitarian law. By the time warring parties come to the negotiating table and make commitments to protect civilians, it is often too late for the dead and wounded, internally displaced, and refugees.[24]

It should be possible for Africa's RECs to chew gum and walk by deploying standby troops to conflict zones, creating safe humanitarian zones or corridors to reach the most affected, and sending observers to monitor human rights and humanitarian law violations even as the search for a political solution between warring parties drags on. These mechanisms should tap into and work with local actors to ensure they are fit-for-purpose and conflict-sensitive. As an example, any troops deployed to quell fighting must understand the

local context and work with existing community and local authority structures to avoid exacerbating any ethnic, tribal, or sectarian divisions while discharging their mandate. The lessons from Rwanda and Darfur are a stark reminder that the protection mechanisms should be triggered independent of political processes before it is too late.

UN Reform

The elephant in the room for the protection of civilians from armed conflict is the in-built, fundamental, and existential inequality in the global peace and security architecture.[25] The UN system casts a long shadow over the fate of civilians threatened by armed conflict. Over the past eight decades, the five permanent member states of the UN Security Council have exercised deterministic influence on conflict in numerous situations, occasionally with devastating consequences for civilians trapped in conflict zones in Africa where the P5 have competing strategic interests. Members of the P5 not only hold veto power over any action by the UNSC but also command the lion's share of global arms sales. Between 2019 and 2023 alone, the arms trade of P5 members accounted for more than three-fourths of global arms sales.[26] Oxfam estimated over a decade ago that 95 percent of the most used arms in African conflicts are supplied from outside the continent, including from P5 countries.[27]

Any meaningful progress towards the protection of civilians and enforcing respect for international humanitarian law will inevitably hinge on the prospects of democratising the UNSC to make it more inclusive, efficient, and responsive to threats facing civilians trapped in conflict. The ways of working of the UNSC and the use of veto power should be reformed to ensure that UNSC's decision-making on interventions in conflict and humanitarian situations are based on the humanitarian imperative and not the strategic interests of the P5.[28] The veto power has been used to block critical action such as resolutions calling for ceasefires or demands on warring parties to ensure humanitarian access in countries such as Sudan, prolonging humanitarian suffering.[29]

Conclusion

The challenge of protecting civilians from armed conflict in Africa sets out what seems to be a Sisyphean task. Past failures such as the genocides in Rwanda in 1994 and in Darfur in 2004 have been spectacularly catastrophic and should have provided sobering lessons on the need to put in place robust protection mechanisms to shield civilians from the excesses of war. However, as demonstrated, the lack of political will to establish and operationalise effective and responsive protection mechanisms perpetuates situations that leave civilian populations severely vulnerable to increasingly deadly conflict.

As a proposed way forward, African Union member states must invest in strengthening conflict early warning systems and linking them to community-based and conflict-sensitive protection mechanisms that respond proactively, rapidly, and effectively to emerging crises. The African Union Commission (AUC), the Permanent Representatives of the African Union Peace and Security Commission (AU PSC), and the respective secretaries of each REC must

work closer together to bolster early warning systems and to solicit buy-in from African governments to reap the peace dividends that would accrue as well as strengthen civilian protection norms.

African civil society groups should also buttress the case for a reimagination and redesign of APSA to adopt more conflict-sensitive approaches, to be more inclusive of local actors and solutions closer to conflict-affected communities, and to incentivise and empower regional actors to act boldly and swiftly in ensuring civilian protection remains the primary objective of interventions in conflict situations.

These efforts, however, would be incomplete without confronting and addressing the fundamental inequality and imbalance in the global peace and security architecture that serves the narrow interests of the powerful at the expense of the fate of the global majority. A reform of the UN Security Council to make it more democratic, inclusive, and effective is long overdue and key to ensuring that the global system prioritises civilian protection over realpolitik. The wind is already in the sails of the UN General Assembly, and the ambitions outlined in the latest UN reform process through the 2023 Summit of the Future call for vigilance by the global majority. Emerging powers should sustain the momentum for UN reform by leveraging their influence through more inclusive platforms such as the G20 and BRICS to overcome the stasis and imbalance of power that has dogged the UN.

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Europe Under Trump 2.0: In Search of an End to its Slow Agony

Velina Tchakarova

In 2025, Europe stands at a "make-it-or-break-it" moment, confronting a multitude of challenges unprecedented in their complexity and scope. Around 100 years ago, following an era of geopolitical stability, Europe plunged into deep uncertainty painfully mixed with nostalgia. The period of prosperity, during which Europe's cultural and societal ideals flourished, was swiftly replaced by a dark transformation. In the works of Proust[1] in *In Search of Lost Time* and Spengler[2] in *The Decline of the West,* this upheaval is depicted as the end of a cultural golden age and the harbinger of decline. In *The Sleepwalkers: How Europe Went to War in 1914,*[3] it becomes clear how Europe's political elites, blind to the looming dangers, almost sleepwalked into the First World War. Only twenty years later, the world Stefan Zweig[4] knew collapsed in collective shock, and the future, once filled with hope and enthusiasm, was replaced by a grim reality of war and destruction. The old stability was irretrievably lost, and the world had changed forever.

Today, Europe bears many similarities to the "world of yesterday" described by Zweig. However, this is less about the decline of Pax Americana—the period of post-war "long peace", led by the West with the United States (US) at the helm. It is more about the "slow agony" of Europe—economically, demographically, industrially, and technologically, as eloquently expressed by Draghi in his 400-page report.[a,5] Innovations once celebrated—such as a common charger within the EU or the locked lids now fixed on bottles—now signal a growing lack of imagination. Germany is often being referred to as the "sick man of Europe",[6] where nothing functions on time or technologically.

In 2025, Europe is confronted with increasing political fragmentation and the rise of populist movements that could further undermine trust in European Union (EU) institutions and decision-makers within EU countries. The EU, described by Ivan Krastev as "over-institutionalised and over-regulated,"[7] is struggling to respond to the manifold, cascading crises. Populist movements are gaining ground as many citizens feel that the established elites are incapable of addressing economic and security challenges. This not only jeopardises trust in Europe's future but also calls into question the political coherence of the continent.

The economic and security problems are closely intertwined, forming a vicious cycle that is increasingly difficult to break. Draghi's report,[8] which paints a bleak picture of a "lost decade", illustrates the severe consequences that the combination of industrial and security weaknesses poses for the continent. Demographic changes, the escalating migration crisis, and geopolitical tensions—exacerbated by the unresolved situation in Ukraine, tensions in the Middle East, and volatility in the Indo-Pacific region—are leading to a significant loss of global relevance. Europe is at risk of slipping further into the margins, becoming the geopolitical backyard of international affairs,[9] as the political and economic elites of the continent are caught in a deep bifurcation, triggered by a lack of consensus on their vision for relations with the US, China, and Russia.

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[a] Mario Draghi—former European Central Bank President and one of Europe's foremost economists-- was tasked by the European Commission to prepare a report of his personal vision on the future of European competitiveness. It was published in September 2024.

The following geopolitical megatrends exert profound influence on Europe's role in the world, and it seems there is a lack of a clear strategic vision and coherent strategy for its future direction.

Cold War 2.0: America and the DragonBear

The geopolitical bifurcation will intensify in 2025 as the rivalry between the US and the "DragonBear" bloc[b,10] fractures the international order and creates centrifugal power relations between the West and the geopolitical bloc of China, Russia, Iran, and North Korea. Europe faces the challenge of positioning itself within this geopolitical bloc system and redefining its relationship with both the US and China. The old formula—security from the US, energy from Russia, and markets and production from China—is long outdated.[11] The new reality increasingly draws Europe into dependency on America in all three areas.

At the same time, European powers are confronted with the failure of their "de-risking" approach towards China and must develop a pragmatic line towards Beijing. The implementation of sanctions against Russia remains problematic, particularly when it comes to importing Russian raw materials through third countries. While the transatlantic partnership with the US remains significant, Europe is being drawn closer to the tensions between the US, China, and Russia. Developing an independent European geopolitical agenda is becoming increasingly difficult.

Trump's second term poses even greater challenges for Europe than his first, especially concerning responsibility for security and defence, as American trust in institutions like the EU and NATO will decline. European countries will likely be forced to invest at least 3-5 percent of their GDP in defence spending,[12] take a vigorous role in supporting Ukraine, and more effectively protect their own neighbourhoods in the Arctic, Eastern Europe, and the Mediterranean.

Escalation of Proxy Conflicts: The Networking of Geopolitical Flashpoints

Trump 2.0 promises an end to wars and conflicts involving US participation. The war in Ukraine was supposed to be resolved within 24 hours, and a new summit with Russian President Vladimir Putin, similar to Helsinki 2018,[c] might not be ruled out. Yet, geopolitically, the winds seem to be shifting: There is still no resolution in sight to the Russian war in Ukraine, nor is there a foreseeable end to Houthi rule in Yemen.

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b The DragonBear concept is a framework that illustrates how China and Russia coordinate strategically across a broad spectrum of systemically relevant domains—from commodities, economy and trade to the technology, defence, and space sectors. It does not denote a formal strategic alliance or military pact but rather a modus operandi through which both nations align their interests and joint actions across multiple fields.

c At the Helsinki summit, Trump and Putin pledged to enhance US–Russia relations and agreed to work together on issues such as terrorism, cybersecurity, and the Syrian conflict. Putin declared that the Cold War was over, while both leaders emphasised that the summit marked an important initial step towards closer, more productive dialogue between the two nations.

The complex web of tensions in the Middle East and Indo-Pacific will also not resolve quickly. Particularly, the Red Sea and the Middle East are likely to be among the most violent and unstable regions in 2025 despite the ceasefire in Gaza following Trump's re-election.[13] However, European countries are increasingly focusing on diplomacy and mediation rather than preparing for deterrence. As military expert Stefan Gady puts it: "Those who rely too much on diplomacy risk not being taken seriously."[14] Gady rightly speaks of "parasitic pacifism", as Europe has "settled comfortably under the umbrella of others."

The escalation of proxy wars, particularly in Ukraine, the Middle East, and the Indo-Pacific, will also affect Europe in 2025 and shift the geopolitical balance further away from the European countries. These are also exposed to political instability and key elections, such as in Germany. European NATO members are becoming increasingly ensnared in these conflicts, whether through military support or economic sanctions. While the US increasingly shifts its geopolitical priorities towards the Indo-Pacific, Europe remains reliant on the American security umbrella. This dependency highlights the weaknesses in European defence policy and could present a fundamental test for Europe in 2025.

The ongoing crisis in the Red Sea (although temporarily put on hold), the emergence of a new Iron Curtain along NATO's eastern flank, and the shifting power dynamics in the Middle East and North Africa add inflationary pressure to European economies. The need for investment in defence, cyber, and security infrastructure will be difficult for European political elites to communicate.

Geoeconomic Fragmentation: Technology, Trade, and Financial Wars

The increasing geoeconomic fragmentation presents Europe with the urgent need to diversify its economic relationships. Geopolitical tensions and Cold War 2.0 context between America and the DragonBear are splitting global supply chains into two alternative networks, forcing Europe to seek partnerships with third countries. While the DragonBear axis presents a challenge to the West, Russia's role remains complex. For instance, despite its alignment with China, Russia continues to benefit India and the broader liberal order. This is evident in ventures like the India-Russia BrahMos missile deal, which has strengthened the Philippines' defence posture against China, indirectly contributing to the stability of the global order.[15]

In this context, economic entanglements with China and dependencies on Russia for raw materials raise the question of how Europe can strengthen its economic sovereignty. Europe must increasingly tap into markets in emerging economies—particularly in Africa, Asia, and South America—to secure its geoeconomic position. At the same time, Europe suffers from a loss of industrial competitiveness in the global competition,[16] particularly vis-à-vis the US and China. This is further exacerbated by rising labour and energy costs. These productivity challenges clash with the EU's lofty climate goals, raising the question of how Europe can maintain its competitiveness while also advancing ambitious decarbonisation efforts.

The technology wars between the US and China will further shape global trade policy and the industry in 2025. Particularly in the fields of semiconductor production, artificial

intelligence (AI), digital infrastructure, and cybersecurity, Europe is far behind in the competition with the US and China. The increasing decoupling of economic systems between China and the US has direct consequences for European countries, which must not only secure their competitiveness in these key industries but also reduce their dependence on either superpower. The EU has begun investing in semiconductors and digital technologies, yet the gap with the US and China remains significant. The challenge for Europe is to play an independent role in the global technological race amid the Fourth Industrial Revolution without being overwhelmed by the geopolitical tensions between the two frontrunners.

Against this backdrop, the ongoing de-dollarisation tendencies,[17] primarily driven by China and Russia within the BRICS+, will challenge Europe to reassess its financial positioning. While some BRICS nations explore alternatives to the US dollar, India has maintained a more pragmatic stance, emphasising stability rather than outright de-dollarisation, as reiterated by officials such as External Affairs Minister S. Jaishankar.[18] A potential currency basket from the BRICS+ nations could still influence the international financial system, especially in light of Trump's expected policies in 2025.[19] For Europe, this means not only reaffirming its partnership with the US in the financial sector but also engaging more actively in shaping a multipolar financial system. By fostering deeper cooperation with emerging markets and supporting a more diversified currency landscape, Europe can work towards greater geopolitical and economic resilience without overstating the BRICS agenda.

Geopolitical and Geoeconomic Scenarios for Europe

Europe stands at a critical juncture: either it will succeed in balancing industry, decarbonisation, and security, or it will lose its geopolitical clout in the long term. However, the EU currently faces the challenge of investing simultaneously in AI, semiconductors, and defence to keep up with the US and China—all while European industry becomes greener. Is this even realistic?

A possible scenario could involve making Europe an industrial giant on weak foundations, prioritising industrial competitiveness at the expense of security and decarbonisation. In this scenario, Europe focuses on its industrial base, supported by EU institutions, while massive investments flow into digitalisation, quantum computing, cybersecurity, and AI. However, Europe would become even more dependent on the US in the security domain. Trump would negotiate harshly on trade matters with the EU but might secure adjustments by pressuring Europeans into concessions in Ukraine and importing more American LNG—at the cost of decarbonisation. A ceasefire between Russia and Ukraine, brokered by American negotiations, could, however, mean that Russia continues its hybrid war against Europe and gradually undermines European security arrangements. Recent sabotage operations in the Baltic Sea, involving several countries, offer only a preview of what may lie ahead.[20]

An alternative scenario could involve prioritising new European industries, such as cybersecurity, space, and defence, in favour of European security—and again at the expense of decarbonisation. Under the pressure of Trump 2.0, Europe might increase defence spending to at least 3 percent of GDP, especially in European NATO member states. Europe would focus on protecting its external borders, taking on additional security tasks so that

the US can direct its attention more towards the Indo-Pacific and China, and investing in high-tech weapons, cybersecurity, and space capabilities. This scenario could help Europe strengthen its geopolitical position and diversify its trade relations in a fragmented world economy.

Great Opportunities: Geopolitical Alliances, Ambitious Infrastructure Projects, and Eastern Expansion

Despite the geopolitical challenges, Europe also has opportunities to solidify its global role. A key step would be intensifying strategic partnerships with countries from the Global South, particularly in Africa, Asia, and Latin America. Similar to MERCOSUR, South America's trade bloc, the EU should forge new free trade agreements with countries and regions like India, the Gulf States, ASEAN, and the African Union—this could grant Europe access to new markets and promote international free trade and multilateralism.

Another key opportunity for Europe's future is the development of strategic infrastructure and multimodal corridor projects, such as the Three Seas Initiative (3SI)[21] and IMEC[22] (India-Middle East-Europe Economic Corridor). These initiatives could help Europe deepen its economic collaboration with emerging economies, overcome geopolitical fragmentation, and establish new trade routes and supply chains. These projects would allow Europe to redefine its economic and geopolitical significance and gain greater access to emerging markets while also creating the missing North-South infrastructure between the thirteen 3SI members of the EU.

What is currently missing from the voluminous Draghi report is the perspective of Central and Eastern Europe. Countries such as Poland, Romania, and Croatia will experience strong economic growth. Infrastructure—particularly transport, energy, and digital corridors running from Scandinavia to Central, Eastern, and Southeastern Europe—still needs to be built. North-South connectivity will increasingly replace the former East-West infrastructure. Former EU Ambassador for Connectivity, Romana Vlahutin, knows how to turn the EU strategy "Global Gateway"—an initiative for building new infrastructure projects such as roads, rail, ports, and data cables—into a success story. She proposes pooling 60 billion euros in development aid and 40 billion euros in export credit support and creating a fund that attracts private investments at a ratio of 1:4 or 1:5. This could generate annual returns of 400 to 500 billion euros and enable investments worth 4 to 5 trillion euros within ten years, promoting ambitious infrastructure projects.[23]

Finally, the European enlargement of the internal market to include countries from the Western Balkans and Eastern Europe represents another crucial geoeconomic opportunity. The geographic and geopolitical location of these countries, serving as a bridge between the EU, Asia, Africa, and the Middle East, could strengthen Europe geopolitically. Integrating these countries into the internal market would not only promote economic connectivity and trade within the EU but also act as a bulwark against the growing Russian and Chinese presence in the region. A stabilised Western Balkans and economic integration of Eastern Europe could further solidify Europe's geopolitical position and contribute to economic coherence.

Recommendations and Conclusion

The current geopolitical and economic developments suggest that Europe risks losing global significance over the next 15 to 20 years due to structural and systemic changes. For Europe to continue competing as an industrial powerhouse in the international race with China and the US, it must urgently address several interconnected issues simultaneously. First, the problem of declining birth rates and an ageing population in Europe must be tackled through targeted measures in migration, family policy, education, and productivity. Furthermore, Europe must strengthen domestic energy production to secure its energy supply and reduce dependency on other countries. Particularly, Europe should no longer rely solely on LNG from the US, rare-earth minerals and technologies from China, and fossil fuels from Russia. Instead, it should focus on alternative energy sources such as nuclear power, domestic gas production, long-term gas contracts with third countries, and the expansion of renewable energy. Finally, Europe must actively address the growing security threats in its southern and eastern neighbouring regions due to interconnected conflict zones and increasing sabotage actions by China and Russia in the north. Clearly, decarbonisation as a long-term goal will suffer a temporary political setback and be postponed.

Against this background are three key takeaways:

- Europe is at risk of drifting further to the margins, thus becoming the geopolitical backyard of international affairs, while the political and economic elites of the continent are caught in a deep bifurcation due to a lack of vision of how to engage with the US, China, and Russia.
- Europe urgently needs to address several interconnected issues simultaneously—from the demographic crisis to securing energy supply and reducing dependence on global superpowers.
- The challenge for Europe lies also in playing an independent role in the global technological race amid the Fourth Industrial Revolution, without being overwhelmed by the geopolitical tensions between the US and China.

In conclusion, Europe will face one of the greatest challenges in its history in 2025. It must make a systemic decision regarding the continent's geopolitical and geoeconomic orientation, which will shape its future role in an increasingly divided global order under Trump 2.0. Whether Europe can succeed in asserting itself as a global actor in a bifurcated world, or it will continue to be overwhelmed by geopolitical forces, will help determine the geopolitical and geoeconomic landscape for decades to come.

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The Outlook for E.U.-China Relations and the Implications for India

Agatha Kratz

As the world watched the Trump administration impose 10-percent additional tariffs on China's exports to the United States (US) and threaten yet more action to contain China's supply chain and technological rise, it is easy to forget that European Union (EU)-China relations have also gone through a sea change over the past decade. Perceptions of China in Brussels and other European capitals have changed fast following mounting concerns over China's unfair trade practices, a more assertive Chinese foreign policy, and rising tensions between China and its neighbours. China's "no limits" partnership with Russia, despite and amidst its war of aggression against Ukraine, have marked an inflection point in Europeans' view of their main Asian economic partner, and pushed the relationship out of its economics-first tracks. More recently, worries over China's overcapacities and their global trade spillovers have heightened too, and turned Europe's long-lasting concerns over China's distortive economic practices into a much more existential worry.[1]

While the past eight years of the US's multi-pronged and whole-of-government actions on China have monopolised much of the headlines of global pushback against Beijing, measures taken by the EU to respond to China challenges have also seen an uptick. Brussels and key member state capitals have shed the naivety of the past, and not only buttressed their defensive toolbox but also started to use it to its full extent. The past two years have seen the European Commission launch a record number of trade defence cases against China (as many as 20 cases targeting Chinese firms and practices, out of a total 32 in 2024).[2] This included probes launched on the initiative of the Commission ("ex officio"), most prominent of which is the anti-subsidy investigation into China-made electric vehicles (EV) that resulted in tariffs last October.

In the past two years, Brussels also aimed its new defensive tools—the International Procurement Instrument and the Foreign Subsidies Regulation[a]—at Chinese economic practices in the wind energy, security equipment, and medical devices sectors, among other targets. Beyond Brussels, member states have tightened their inbound investment regimes to better tackle risks from (especially Chinese) acquisitions of European tech companies and critical infrastructure. Some have even started banning certain Chinese suppliers in power generation projects out of cybersecurity concerns.[3] Debates are ongoing, finally, about the EU's economic security agenda, de-risking objectives, and need to rekindle European competitiveness.

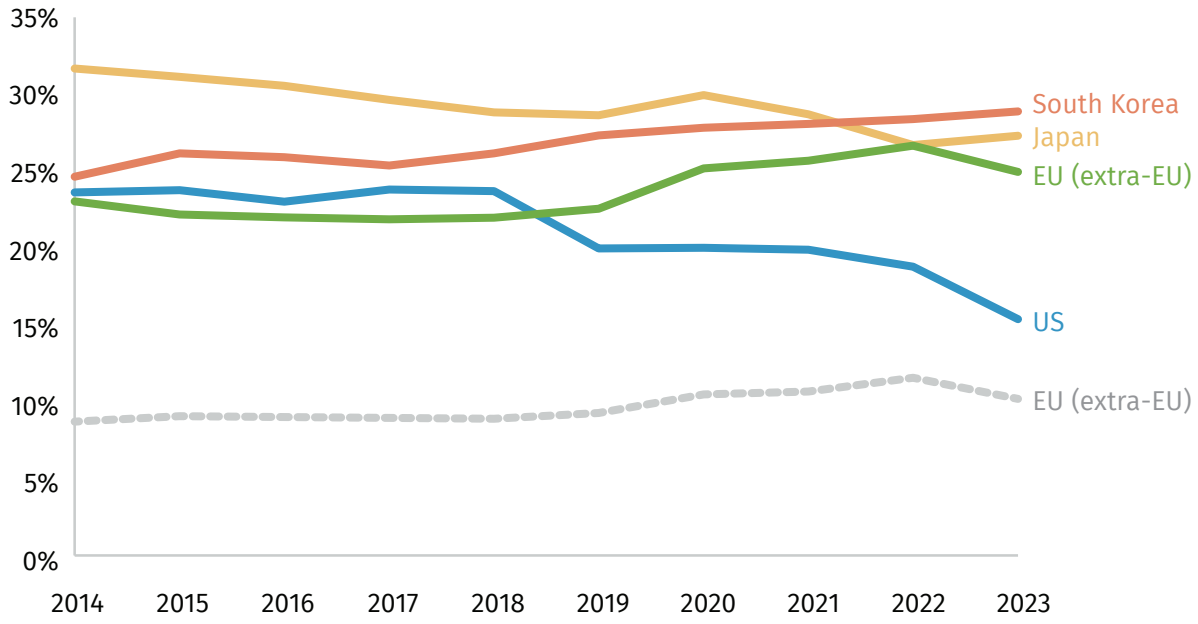
Weighing the Impact of the EU's Newfound Activism

Yet, Europe's new China activism has so far had a much more limited effect on EU-China economic ties, compared to US actions. While the US has seen a marked decline in its reliance on Chinese imports since the first trade war started in 2018, the EU has increased its dependence on Chinese goods and inputs (see Figure 1). While US foreign direct investment (FDI) in China is declining as a share of total US FDI, and Chinese FDI

[a] The International Procurement Instrument (IPI) regulation aims to promote reciprocity in access to international public procurement markets, while the Foreign Subsidies Regulation grants the European Commission the power to investigate financial contributions granted by non-EU governments to companies active in the EU.

in the US remains at an all-time low, Chinese firms invested 48 percent more in Europe in 2024 compared to 2023, and European greenfield FDI in China is at a historical high.[b] Europe is much more at risk than the US from China's economic and strategic choices, too. Its dependence on Chinese critical minerals and green-tech inputs is increasing from an already high basis, and its vulnerability to Chinese overcapacities is stark.

Figure 1. China's Share of Partner Imports, Excluding Oil and Gas (2014-2023, in %)



Source: International Trade Centre[4]

The reason for this gap is a very different policy mix: Europe is much more focused on slower-to-deploy, often much narrower, and stubbornly World Trade Organization (WTO)-compliant trade and economic defensive tools. Europe's much greater openness to Chinese green-tech imports and inputs, and far more limited financial support to major European industries, has also played a big role in the marked differences in EU and US outcomes. The lack of clear high-level EU messaging on de-risking (beyond broad and often unrealistic objectives, such as the ones set out in the Net Zero Industry Act) and of efforts to promote alternative production or sourcing bases for companies, has also played against European firms' willingness to diversify away from China. Today, instead, the narrative has become one of "diversification fatigue" in business circles. Finally, in the European context, more defensive China policy actions have not been universally supported by EU member states. Germany's opposition on the EV duties is one example, and Hungary's warm welcome to Chinese FDI is another.[5] In the US, by contrast, there is a deep bipartisan consensus on China.

[b] According to data from the Bureau of Economic Analysis and Rhodium's Cross-Border Monitor.

Which Way Forward?

Against this backdrop, what can be expected going forward? After a tense 2024, that saw tit-for-tat escalation between the EU and China on the trade and export control fronts, relations have entered a period of suspended animation as Brussels and Beijing struggle to make sense of the new Trump administration and its implications for geopolitics.

Trump-induced insecurities are pushing EU leaders to hedge their bets. Resentment of recent US trade actions (including Trump's reimposition of steel and aluminium tariffs following a multi-year truce under Biden), and concerns of more to come, run deep. However, transatlantic irritants have become broader. US demands have moved beyond the realm of trade and defence spending to what are seen as attacks on Europe's liberal democratic values and its efforts to curb the excesses of Big Tech. Trump has even threatened to take Greenland by force. The exclusion of Ukraine and Europe from the US's peace talks with Russia, and US Vice President JD Vance's meddling in European politics at the Munich Security Conference in February, have Europe worried that a new era is dawning, in which the US will be seeking to weaken and undermine it on the economic, political, and strategic fronts.

These actions put the entire bloc in a vulnerable position and explain the recent rhetorical shift on China that has been seen from European Commission President Ursula von der Leyen and other senior EU officials. At the World Economic Forum in Davos in January, von der Leyen suggested that while the EU's concerns about China remain, the bloc could be open to deepening trade and investment ties going forward.[6] Von der Leyen reiterated the message at an annual meeting of EU Ambassadors in early February.[7]

So far, this soft pivot is not underpinned by substance: the Europeans have not changed their policies toward China nor unveiled new plans to engage at the highest levels with Beijing. However, if Brussels feels under attack on multiple fronts from the US, it will seek to reduce tensions with Beijing. This could lead both sides to pursue talks aimed at shelving their main trade disputes—for example through a minimum import price deal on China-made EVs, in exchange for a withdrawal of Chinese trade defence cases against brandy, dairy, and pork. This year could even see Europe and China finding a new impetus for bilateral dialogues on climate and green technologies, especially if Beijing shows willingness to ramp up investments in Europe.

Still, the barriers to a meaningful improvement in EU-China ties remain high. The EU's concerns about China have not changed—and if anything, they are likely to grow in 2025. The EU's industrial base and job market is likely to come under increasing strain from Chinese imports as structural imbalances persist in China's economy, and the US locks Chinese products out of its market. China's deepening economic relationship with Russia will remain a source of concern, even if a peace deal for Ukraine is achieved. Europe's array of trade and level-playing-field cases against China will move ahead, with many coming to fruition in 2025. China is likely to respond with coercive action around critical minerals and other inputs, highlighting dependencies and heightening concerns.

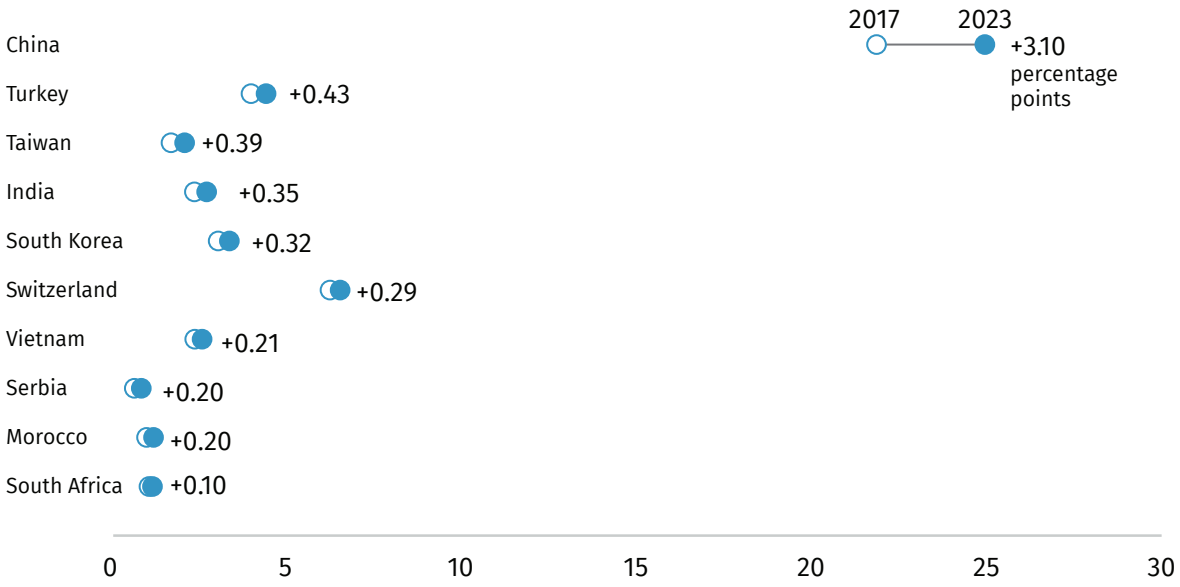
For now, there are no signs that China is prepared to address the EU's core concerns around overcapacities and its relationship with Russia. With the US putting in question decades of close transatlantic partnership, Beijing likely views the EU as especially vulnerable and has little incentive to make concessions. More likely than a full-blown reconciliation is a push by both sides to reduce the temperature in the relationship from a boil to a low simmer.

Potential Implications for India

India has over the past few years emerged as an "alt-China" destination for various countries—first and foremost the US, but also Europe (see Figure 2)—particularly in sectors like mobile phones and solar PVs. To be sure, the country has not yet managed to attract interest at the levels of Mexico or Vietnam,[8] due to trade and investment barriers, and regulatory and administrative complexities. However, an overconcentration of supply chains in Vietnam and Mexico is becoming a liability, and ultimately, India is the only country with the size and scale that could replicate China's manufacturing efficiencies.

Figure 2. Trade Partners with the Largest Positive Change in Their Share of EU Imports, Excluding Oil and Gas (2017 & 2023)

Percentage point change, extra-EU imports



Source: International Trade Centre[9]
Note: This graph includes only extra-EU trade. HS product codes 2709, 2710, and 2711 (oil and gas) excluded.

In the short term, in a context of US tariffs, it will be a tall order for Europe to diversify further. However, in increasingly geopolitical times, de-risking from China is unlikely to wane as a policy and business objective. India's human and market strengths, as well as fast-paced growth, make it a difficult-to-ignore destination for manufacturing, sourcing, and market diversification. This will foster significant opportunities to grow two-way trade and investment ties.

India is also a prime option for "diplomatic diversification", as demonstrated by the fact that India will be the destination for the first foreign trip of the new Commission. Opportunities for closer EU-India cooperation abound—these could include partnerships on connectivity (including via the India-Middle East-Europe Economic Corridor) and industrial and technological cooperation on green technologies such as hydrogen, climate finance cooperation, enhancement of people-to-people flows and research and innovation ties, and critical supply chain de-risking initiatives.

Trump's decisions will matter here too. India's ability to ride the current diversification wave hinges on continued domestic reforms, but also on US tariff and tech policies that will affect the restructuring of global supply chains. It will also depend on Washington's willingness to present India as a secure and stable long-term strategic and economic partner. The recent US-India summit provided a strong signal to that effect. And in the current context of heightened trade tensions between EU and its main trade partners, Brussels will be looking for alternatives—much to India's benefit.

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9 "Trade Map"

Strategic Competition in the Indian Ocean: Why Island States Matter

Kate O'Shaughnessy

In late 2023, the United States (US) established its first ever embassy in the Maldives. That same year, so too did Australia, joining a small but growing diplomatic corps in the northeast Indian Ocean island nation, that includes the United Kingdom, India, China, Japan, and Saudi Arabia.

The impetus was not economic—the tourism-dependent Maldives only has modest economic and people-to-people ties with both the US and Australia. Rather, the move reflected growing concern about the influence of China in the wider Indian Ocean region. It also recognised that small island states—just as much as global powers—play a vital role in shaping the region. As strategic competition heightens across the Indo-Pacific, how the Indian Ocean region looks in the coming years will depend partly on who engages with those small island states, and how they do so.

The Indian Ocean: Who's There, and Who Cares?

The Indian Ocean region is extraordinarily diverse. Home to one-third of the world's population (2.7 billion people), it encompasses 23 countries, ranging from global economies India, Indonesia, and France, to small island states like Mauritius and Seychelles, as well as fragile states like Yemen and Somalia. It also hosts some of the world's most important shipping lanes—and precarious chokepoints—through which a third of the world's container traffic and two-thirds of global oil shipments pass.[1] That makes it important to many countries, but especially China, which gets 80 percent of its oil and LNG via just one Indian ocean bottleneck—the Strait of Malacca.[2]

Still, the region, historically, received little international attention. In late 2023, however, the first of a series of Houthi-rebel-led attacks on commercial shipping in the Red Sea demonstrated not only the global significance of the Indian Ocean, but the increasing geopolitical fragmentation of the region. With over 100 attacks since then, most ships are now forced to take the costlier route around Southern Africa. However, Iranian, Chinese, and Russian ships continue to pass through the Red Sea freely.[3]

This growing presence of external players in the Indian Ocean is a notable change in the region. Previously, India and France were the dominant players. Though the US has maintained a military base at Diego Garcia in the central Indian Ocean since the late 1960s,[a] India has long seen itself as the region's net security provider.[4] In its 2015 National Maritime Strategy, it identified the entire Indian Ocean (from eastern Africa to

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[a] The military base has been the subject of a long running sovereignty dispute between Mauritius and the UK. At the height of the Cold War in 1965, the UK detached the Chagos archipelago from its then-colony of Mauritius, three years before Mauritius gained its independence. The UK renamed the archipelago the British Indian Ocean Territory, forcibly removed Chagos islanders to Mauritius and Seychelles, and leased the island of Diego Garcia to the US in return for a US$14-million discount on Polaris nuclear missiles. In the years ahead, Diego Garcia became a critically important US military asset—essential for power projection into the Indian Ocean and a staging point for operations in the Middle East including Afghanistan and Iraq after 9/11. In late 2024, the UK and Mauritius governments reached a deal to return the Chagos Archipelago to Mauritius, with the UK to exercise Mauritius' sovereignty over the island of Diego Garcia for a further 99 years. But following the US election, the UK announced that it would delay signing off on the deal until the new Trump administration has had an opportunity to consider it.

the Lombok Straits), as its "primary area of interest" and has a navy of around 150 ships and submarines positioned across the region.[5] Meanwhile, France—an Indian Ocean nation through its overseas territories of Réunion and Mayotte—is heavily engaged in the western Indian Ocean, where it is a substantial aid donor of around US$1.5 billion annually; it maintains a resident military presence of 2,000 personnel on Réunion.[6]

Over the last decade and a half, more states have boosted their Indian Ocean engagement, to access trade opportunities, garner strategic support, and maintain access to sea lines of communication. This includes Japan (a major development partner), Turkey (funding a port in Somalia, and finding new markets for its defence industry including in Maldives, Pakistan, and Sri Lanka),[7] and Saudi Arabia and the United Arab Emirates (both focused on aid and trade, as well as ties with Islamic countries like Comoros and Maldives).[8] The US is also enhancing its presence, re-opening its embassy in Seychelles in 2023[b] along with the new post in Maldives, and introducing in 2024 a bipartisan bill to Congress—the Indian Ocean Region Strategic Review Act—that calls for an examination of US interests in the region and identifies island states as crucial partners.[9]

Russia is there too. It established a port in Sudan in 2020, and is trying to get support for its war in Ukraine. Some analysts have also noted Russia's support of anti-French sentiment in the region.[10] According to media reports, notorious arms dealer Viktor Bout (now a member of the Russian state parliament) was in talks in late 2024 with Houthi rebels to supply them with weapons—reports that Kremlin denied.[11]

China's Indian Ocean Step-Up

Of all the countries with a footprint in the region, it is China that has garnered the most attention, both for the scale of its engagement, and the areas in which it has engaged—ports, communications, and security.

On scale, China remains unmatched by any other partner. It has embassies in every Indian Ocean country (including all the island states—the only country to do so), is a member or observer of all the regional organisations (including the Indian Ocean Rim Association), and is one of the most important economic partners for almost all countries in the region.

Its investments in port and communications infrastructure have laid strong foundations for any future security needs. It established a military base in Djibouti in 2016 (that supports an estimated three to eight Chinese warships on rotation in the Indian Ocean at any given time) and has invested in or built 17 ports around the Indian Ocean rim (with

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[b] The original US embassy in Seychelles closed in 1996, in tandem with the closure of a US Air Force Satellite Control Network tracking station (one of nine global tracking stations that assisted the National Aeronautics and Space Administration's shuttle operations). For the next 27 years, the US relationship with Seychelles was managed from its embassy in Mauritius.

Gwadar in Pakistan and Hambantota in Sri Lanka the most well-known, but also including smaller projects in Djibouti, Madagascar, Kenya and Tanzania).[12] Via Huawei, it has provided undersea cables to Seychelles, Comoros, Maldives, Sri Lanka and others that give it access to information.

In recent times, China's surveillance vessels have increased the frequency of their ocean mapping exercises in the Indian Ocean, most controversially in the Bay of Bengal where Indian nuclear submarines operate.[13] Further, it is seeking to boost security cooperation with countries around the region, from its recent security pact with Maldives, to sending a military delegation to Sri Lanka in March 2024 to "promote bilateral security cooperation," to its first ever bilateral military exercise with Bangladesh in May 2024.[14]

To be sure, China has not displaced India as the net security provider in the Indian Ocean region. Still, its gradual yet consistent buildup has given New Delhi and others pause for thought, as it shows the fragility of a region's strategic balance.

The Agency of Small Island States

Amidst anxiety about a more robust Chinese presence in the Indian Ocean region, less attention has been paid to the perspectives and needs of Indian Ocean small island states. Yet, their views and choices matter greatly to the trajectory of the region.

First, small island states need partnerships because of their economic vulnerabilities, exposure to climate change effects, and massive Exclusive Economic Zones. For example, Mauritius (population: 1.2 million) is responsible for almost 1.3 million square kilometres of ocean. Near-neighbour India oversees double that area, at 2.4 million square kilometres—but with enormous human and economic resources behind it. In cases like these, the best option for small island states is to ask for help.

Small states are not passive, though. They have agency—albeit, uneven across island states—in who they work with, and who gets access to what (especially ports and logistical facilities). Some states have more options than others. Mauritius, for instance, comparatively more developed, has a close partnership with India and many other countries. Having far fewer options is Comoros—which has experienced some 20 coups, both successful and failed, since independence in 1975 and where the current president is accused of grooming his son for the presidency. In that island state, China is the leading creditor and a weighty donor.[15]

Second, as geopolitical competition intensifies, so too will small states' commitment to non-alignment. However, the way that non-alignment is expressed will not always be to the liking of larger states. Thus, some in the Indian Ocean region, for example, abstained from United Nations (UN) votes on Ukraine on the grounds that it was a geopolitical conflict in which they should not interfere.[c,16]

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[c] These countries include Bangladesh, South Africa, Ethiopia, Sri Lanka, Pakistan, and India.

Small states governments will also come under more pressure from anxious populations, who will increasingly see their countries' security decisions as "choosing sides." When Seychelles joined Operation Prosperity Guardian (the multinational effort to combat Houthi attacks in the Red Sea), its government came under public criticism for involving itself in what the Seychellois public perceived as a "Middle East issue."[17] The Mauritian government's decision to allow India to build a military facility on Agaléga Island received similar pushback, for giving a larger power access to sovereign territory.[18]

Third, small island states in the region do not necessarily see China as a threat, but rather another, sometimes better choice.[19] Maldives may be the starkest example of this perspective, with successive Maldivian governments since 2013 vacillating between pro-India and pro-China presidents.[20] India is also facing a broader backlash across the region—election campaigns in Maldives and Bangladesh in 2023 and 2024 were both marked by some version of an "India Out" campaign; Sri Lanka has had such protests in the past as well.[21] India's efforts to establish a naval base on Seychelles' Assumption Island were scotched by the Seychellois government in 2020.[22] Even in Mauritius—where 70 percent of the population are of Indian descent—former Prime Minister Pravind Jugnauth came under fire in parliament over several years for being too "pro-India".[23]

Where to Next?

The future of the Indian Ocean region looks much more unstable, and uncertain, than it did a decade ago. It will need more sustained and coordinated engagement from the international community than it has ever had before. More importantly, if such engagement is to be impactful, it must include island states and address the issues that matter most to them—climate change, maritime domain awareness, regional economic integration, and human capacity building. As bigger players like India, France, Japan, the US, the UK, the EU, and Australia seek to work together in the region, they may want to consider developing integrated Indo-Pacific Island strategies. In doing so, small island state voices must be at the table.

It will not be easy. The diversity of the region along with weak regional architecture makes doing things collectively in the Indian Ocean region difficult; entrenched habits of cooperation, present in the Pacific Islands context or Southeast Asia, are absent in the Indian Ocean. But the price of inaction could be high. For those countries invested in maintaining stability in the Indian Ocean (both from within and external to the region), listening more closely to small island states will be a vital piece of the puzzle.

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Seismic Shocks, Shifting Sands: Framing Global Response to Persistent Inequities in Healthcare

Ayoade Alakija

In discussing how the world should respond to inequities within health systems and interventions, well-established responses might immediately come to mind: promoting Universal Health Coverage, increasing local primary health care infrastructure and human capital, and addressing social determinants and root causes of ill health. Yet, when considered around the knowledge that health systems are inextricably linked to geopolitics and geoeconomics, the question of how to address inequities becomes appositely centred on how to increase the agency and autonomy of the Global South.

Considerations within this context involve espousing the benefits of relocating the headquarters of global health multilateral institutions to the Global South to better ensure that interventions are developed and delivered *with* rather than *to* the communities that global health is intended to serve; moving towards southern-hemispheric sovereignty in the production of medical interventions such as diagnostics, vaccines, and therapeutics; encouraging and enabling countries in the Global South to fund their own health initiatives and infrastructure; and systematically dismantling the donor-recipient model of global health funding to ensure that countries in the Global South are empowered to step up.

Whatever the answers might have once been, today there is a profound sense of January 2025 being a 'moment of before and after' in the global health arena. It thus seems pertinent to reconsider this question in the context of what comes after this moment in time. Psychology defines such moments as "significant points in time where a noticeable change occurs, essentially dividing one's life or situation into a 'before' and an 'after' phase."[1] January 2025 as a 'moment of before and after' transcends individual, national and cultural perspective and circumstance. It is global and it is seismic.

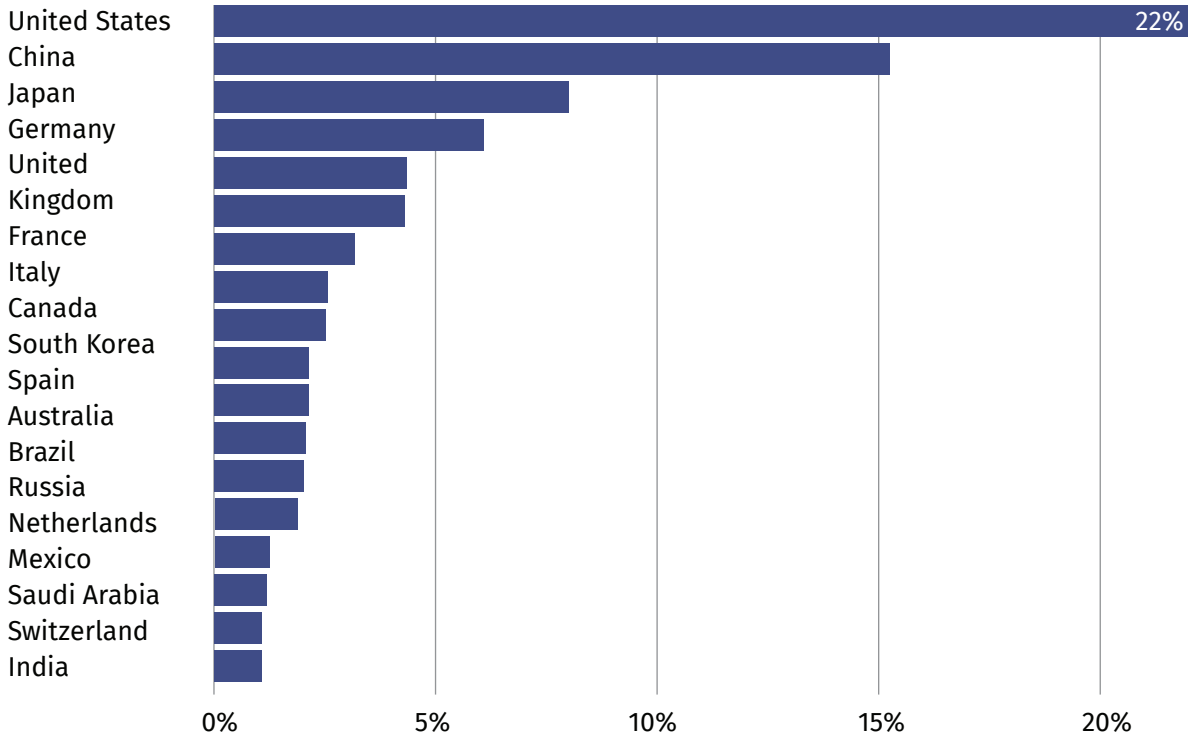
Although it feels premature for Global Health to have arrived at another pivotal point after which nothing will be the same so soon after the last one, when COVID-19 was declared a pandemic and the world closed down, it is wise to take a moment to survey the terrain in which we now find ourselves. This time, the fulcrum is political rather than pathogenic. Within hours of the inauguration of the 47th president of the United States (US) and throughout the succeeding week, a flurry of new executive orders was signed while other long-standing orders were revoked. It is several of these implementations and revocations that will redefine the global health landscape and create new opportunities for the Global South.

On 20 January 2025, the US Department of Health and Human Services halted all research grant reviews, travel and training for scientists at the National Institutes of Health, the world's largest public funder of biomedical research with a US$47-billion budget.[2] Federal health agencies including the Food and Drug Administration and the Centers for Disease Control and Prevention were directed to freeze all external communications.

On the same day, an Executive Order to 'Withdraw the United States from the World Health Organization (WHO)' was also signed.[3] The US contributes around US$1 billion or 22 percent of the organisation's annual budget of US$6.8 billion. For comparison, the next largest state donor is Germany, which contributes around 3 percent of the total annual budget.[4]

Figure 1. Global Leaders in AI

The US is the largest fund contributor to the World Health Organization
Share of mandatory fund contributions from 2024-2025

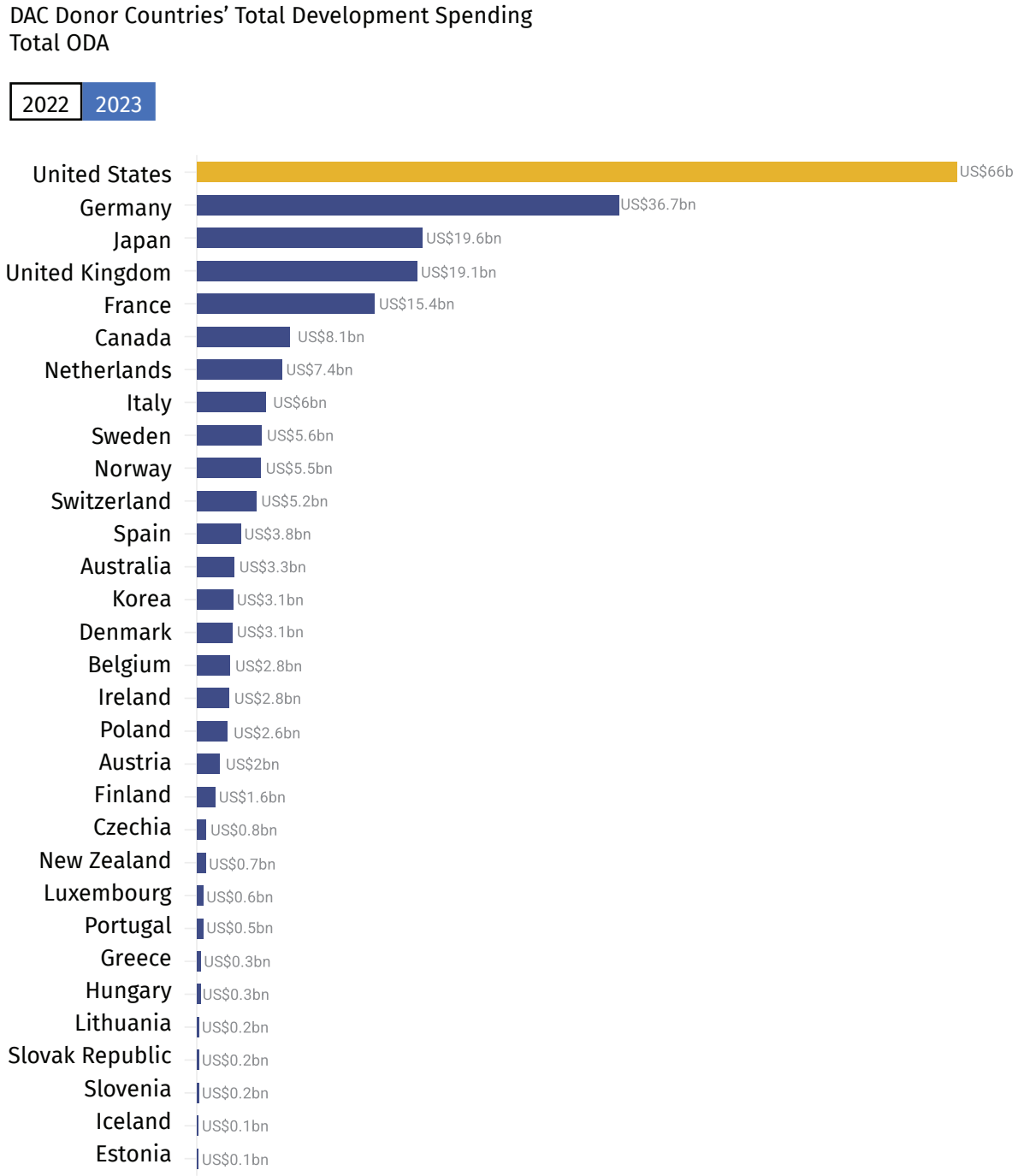


Source: Reuters[5]

The Secretary of State was ordered to cease negotiations on the WHO Pandemic Agreement and US public health officials were told to stop working with WHO, with immediate effect. This will compromise ongoing investigations surrounding the outbreaks of Marburg virus and Mpox in Africa and the spread of bird flu within the United States and beyond.[6]

It is not an overstatement to say that these orders alone are enough to alter the global health terrain; yet there were more. The US State Department issued executive orders to pause all new foreign aid spending with immediate effect, as well as a stop-work order for existing contracts and grants.[7] Again, the US is historically the largest donor of Official Development Assistance to the Global South.[8] The latest OECD figures for total development spending shows US assistance of US$66 billion, followed by German assistance of US$36.7 billion.[9]

Figure 2. Donor Countries' Total Development Spending (2023)



Source: Donortracker.org[10]

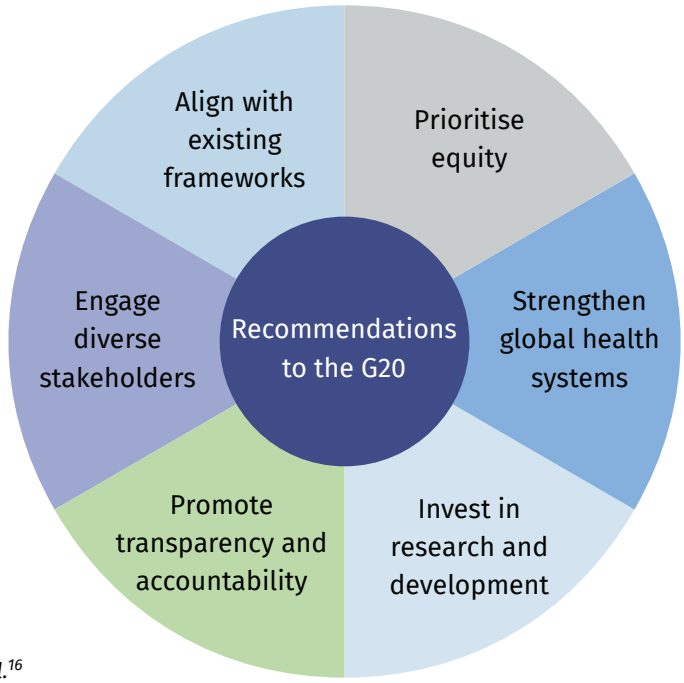
The rationale for these executive orders is stated as the following: "The United States foreign aid industry and bureaucracy are not aligned with American interests and in many cases are antithetical to American values."[11] The 90-day pause on foreign aid includes funding for the medication needed by 25 million people living with HIV. In the absence of these medications during this time, HIV is likely to develop resistance to current medications, making a re-instatement of previous programmes ineffectual and a worldwide health crisis inevitable.[12]

One might wonder what national values could uphold this course of action and woefully, there is clarity to be found in two further Executive Orders: The order for 'Initial Rescissions of Harmful Executive Orders and Actions'[13] revokes 78 executive orders from previous administrations that promote equal opportunities, support underserved communities, and combat discrimination. This, more than anything, radically changes the answer to the question of what the world should do to respond to inequities in access to health interventions and to addressing inequities across all domains.

Federal employees are being urged to report colleagues who fail to comply with this new regime and have been cautioned that those who fail to blow the whistle may face disciplinary action.[14] With multiple pathogens of pandemic potential active around the globe, it makes little sense to foster a culture of cuts and circumspection when collaboration is so desperately needed to reach a pandemic agreement.

Sound recommendations made by scholars, such as those contained in ORF's May 2023 policy brief, 'Preparing for the Next Crisis: The G20 and the Pandemic Treaty',[15] have been directly undermined by the actions and values upheld by the executive orders listed above. Further delay in reaching an agreement runs the risk of losing the lessons learnt from COVID-19 and the principles of equity and benefit-sharing which were to be embedded in the treaty.

Figure 3. Recommendations to the G20 for Negotiating the Pandemic Treaty



Source: D'Souza et al.[16]

The Potential 'After'

Even though the change of policies is only applicable to federal institutions in the US, researchers fear that federal funding will be used to force universities and other scientific institutions to follow suit.[17] How can the global health community not only prepare for the next crisis but maintain routine health services amidst these developments? How can the global health community broaden the definition of health beyond pandemic prevention to include physical, spiritual, and emotional health outcomes while simultaneously firefighting the most pressing of life-threatening crises with reduced funding and collaboration?

Last year's *Raisina Files* upheld "creation and cooperation" as the call of this century; looking back from where we now stand, those words feel prophetic.[18] The editors' note pointed out that "doomsaying is rarely conducive to transformation, and doomsayers seldom build our futures. Take that line segment, with all its linearity and finiteness, and make it a circle: The more productive Indic notion of *Pralaya*—the end of one age and the rebirth of another; the deep notion that destruction is intrinsically linked with creation, that every Armageddon is necessarily followed by a Genesis."[19] The global health community must ensure that this 'before and after' moment proves to be a genesis. Instead of it being construed as "the darkest day for global health ever experienced",[20] every effort must be made to ensure that it is the dawning of an alternative age—the long-awaited epoch of equity.

The disproportionate amount of global health funding provided by the US carried a disproportionate amount of power. With the United States withdrawing from WHO, it will cede this power which can then be re-distributed.[21] This is a moment of geopolitical shift as the US makes itself less relevant to global policies and practices. In response, emerging economies might now put more money into WHO, effect policies and set agendas that were previously opposed by the US.

Indeed, one of the greatest obstacles to reaching a pandemic agreement has been the issue of waiving patenting rights for medical countermeasures so that countries in the Global South are able to gain sovereignty in production rather than relying on inadequate supply chains that are further reduced by nationalism. In negotiations to date, the US and the European Union have stood in opposition to countries in the Global South on this issue. Without the United States taking the contrarian position, there will be a greater chance for more equitable approaches to intellectual property patents and the production of medical countermeasures.[22]

The Global South is rising: India's G20 presidency demonstrated great leadership in advocating for developing and emerging economies and providing support, in particular, for African nations.[23] The Voice of the Global South Summit in 2023 unified the voices and visions of the 125 countries that participated.[24] In September 2024, China promised African countries US$50 billion in funding and at least 1 million jobs for mutual cooperation in achieving modernisation.[25] Shortly after, Indonesia pledged a US$30-million donation to WHO.[26] Power is shifting hands and that has the potential to create a more just and equitable world in the long term.[27]

A World A Long Time Coming

It has been nearly 25 years since the African Union governments adopted the Abuja Declaration that set a target of allocating at least 15 percent of national budgets to healthcare improvements;[28] it is also nearly 50 years since the UN General Assembly endorsed the Buenos Aires Plan "to strengthen the capacity of developing countries to identify and analyse together their main development issues and formulate the requisite strategies to address them."[29] The ineffectiveness of the donor-recipient model of global health funding has long been lamented by countries in the Global South. The radical reduction in aid flowing along the traditional North-to-South access will thoroughly rupture this model and present an opportunity for countries in the Global South to gain control of their own destinies.

These countries have waited a long time. Some three dozen new states achieved autonomy in Asia and Africa in post-war 1960s and '70s—these countries, as described by Prabhu (2024), "suffered from multiple challenges in governance, economic security, ensuring political rights, providing access to basic resources and amenities. As expected, the traditional donors looked for avenues to exert influence through a variety of economic, political and social channels, aid being one of them."[30] If granting foreign aid to these emergent independent states has historically "created pressure, political tensions and economic interdependence,"[31] then a decrease in foreign aid and economic interdependence and the inherent colonial nature of the donor/recipient model ought to then shrink, thereby reducing the hegemonic influence of the Global North.[32] There is a deep and often ignored contradiction within global health as it "was birthed in supremacy, but its mission is to reduce or eliminate inequities globally. To transcend its origins, global health must become actively anti-supremacist, and also anti-oppressionist and anti-racist. Equity and justice involve flipping every axis of supremacy on its head."[33]

It is unclear at the time of writing how many executive orders will be upheld by the legislative and judicial branches of the US government and so speculating on specific outcomes does not offer clarity. In the short term, a withdrawal of US global health funding and foreign aid would undoubtedly cause unimaginable suffering to those whom the funds are meant to support. But to construe the very real possibility of this happening as nothing other than disastrous will not serve us in moving beyond it.

The withdrawal of billions of dollars in US funding may seem like it would create an insurmountable shortfall. However, as total net private wealth is predicted to reach US$629 trillion by 2027,[34] it seems possible that the deficit could be covered by wealth taxes and philanthropic donations alongside increasing contributions from emerging economies in the Global South.

There is a call for philanthropists to "address the inherent power imbalances between funders, nonprofits and the communities they serve";[35] on the flipside, there is a growing recognition that "chronic underinvestment in health by several African governments has created an enabling environment for African global health practitioners to be significantly dependent on external funding."[36] There is a need for a meeting in the middle so that

increased funding from governments of low- and middle-income countries inspire greater trust from philanthropists and empower global health practitioners in and of the Global South.

Onward to Global Health Equity?

Global Health researcher, Lioba Hirsch theorised that equity in global health "means a radical redistribution of funding away from HICs, a loss of epistemic and political authority and a limitation to our power to intervene in LMICs."[37] She presumed that that this would never happen, but the executive branch of the United States is inadvertently attempting to create the very conditions that Hirsch predicted would generate equity on a global scale while deliberately deeming efforts towards achieving equity within its own borders as radical and illegal. This rollback on civil rights and equal opportunities will embolden those who are sympathetic to the 'values' that are being upheld in the Executive Orders so that the current climate in no way assures us of a more equitable distribution of power and funds. Global health leaders will need to be courageous and creative in the face of events yet to unfold. Those in the Global South, in particular, will need to step up and out of learned helplessness.

The end goal of achieving equity in access to healthcare systems requires every global health organisation to consider, "Who controls global health funding? Who sets the agenda? Whose expertise is highly regarded? Who occupies the most influential jobs? Which organisations get funded, where are they located and who leads them? Where are major conferences held? Who gets published in the most influential journals?"[38] We must redress imbalances, reverse unidirectional flow of funding and expertise from the Global North to the Global South, and reject parasitic proposals that seek to merely copy-and-paste health solutions. We must ensure proportional representation of the marginalised majority populations in global health institutions.[39]

For instance, women and girls in the Global South make up 42 percent[40] of the global population and have considerable and consistently reduced health outcomes[41] yet occupy only 2.1 percent of seats on the boards of the global health organisations that purport to represent them.[42] Such marginal representation for women and girls will not achieve equity. There is an imperative to double down on efforts towards ensuring equity and equal opportunity and seek to shatter the "mud ceiling"[43] that hovers over organisations and practitioners in and of the Global South. Mechanisms for internal and external accountability to tackle racism in institutions and funding organisations must be constantly scrutinised and, as far as possible, globalised.[44]

In the new terrain that is spread before us, US actions to distance itself from global health multilateralism creates an opportunity to build a new global health architecture that is owned by, and will benefit the people that it seeks to serve. Countries of the Global South must seek to create growth through empowerment and collaboration and break open like seeds to germinate the genesis of lasting equity.

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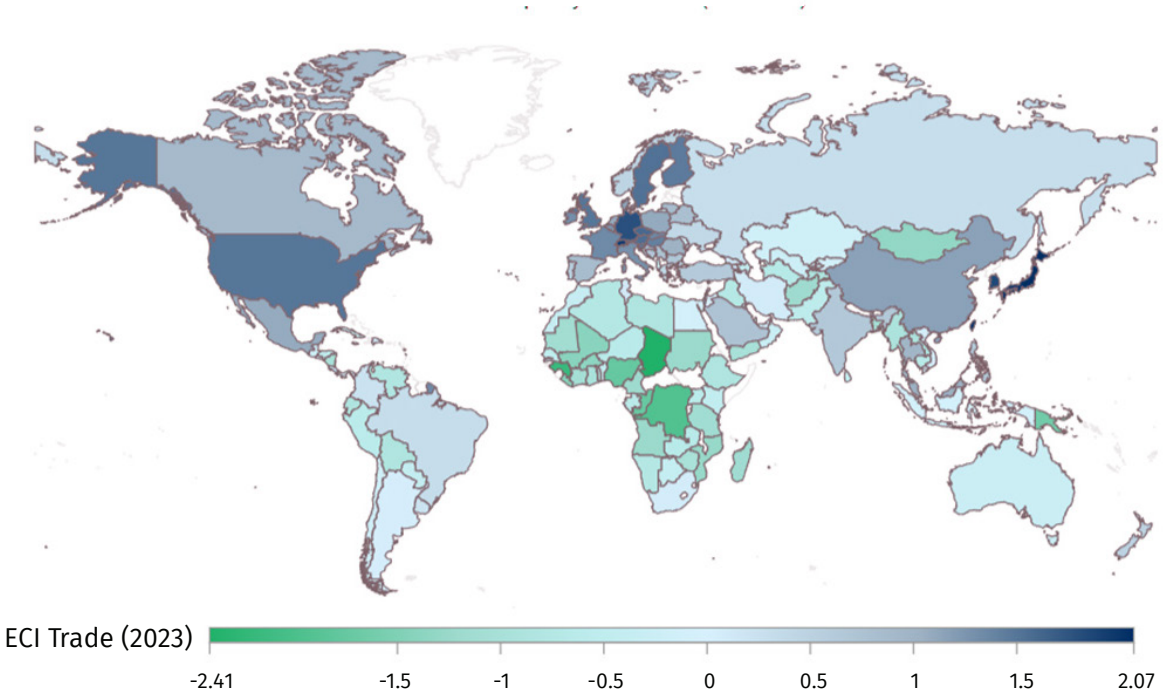
Trade as an Engine of Socioeconomic Transformation

Kekeli Ahiable

Over the past century, international trade in goods and services has expanded more than 40-fold, increasing from a fraction of global output in 1904 to over 59 percent of world GDP today.[1] Countries that are deeply integrated into global value chains, trading in higher-value and more complex goods, are among the most prosperous nations today. The ability to move up the value chain—from exporting raw materials to producing high-value manufactured goods—has defined the development trajectories of fast-growing economies such as South Korea, China, and Singapore.

This prosperity remains unevenly distributed. A country's share of global production and the complexity of its exports directly correlate with its level of economic development. The world's poorest economies tend to trade lower-value primary goods and face constraints that limit manufacturing growth and industrial diversification. As a result, developing countries, home to nearly 90 percent of the world's population, struggle to compete on equal footing in international trade.

Figure 1: Country Ranking by Level of Economic Complexity in Trade (2023)



*Source: Observatory of Economic Complexity (OEC).[2] * International borders as they appear in the original.*

Note: The Economic Complexity Index (ECI), compiled by the Observatory of Economic Complexity (OEC) is a measure of the relative knowledge intensity of an economy. EC metrics incorporate information about the level of sophistication of each product in a country's export basket. See: https://oec.world/pdf/multidimensional-economic-complexity-and-inclusive-green-growth.pdf

Figure 1 illustrates these patterns. In the graph, the highest number to the right of zero on the scale reflects the greatest economic complexity in trade, as denoted by the intensity of the blue colour. Conversely, the numbers to the left of zero on the scale indicate lower economic complexity, represented by the colour green. Unsurprisingly, LDCs and developing countries score the lowest due to the nature of their exports, illustrating how a country's share of global production and the complexity of its exports are correlated with its level of economic development.

For many, addressing this inequality is not just a trade issue—it is an economic and social imperative. Over 700 million people in developing economies continue to live in extreme poverty.[3] Without expanded access to global markets, economic opportunities remain limited, fuelling increased migration pressures, for example from Africa to Europe or from Latin America to North America.

While national-based trade policies can help countries integrate into global markets, expand industrial bases, and attract investment, they require a normative framework such as the World Trade Organization (WTO), which has established a rules-based global trade system to foster growth worldwide. However, recent shifts in trade dynamics are threatening past progress.[4]

The rise of bilateral, regional, and plurilateral trade agreements can complement and reinforce the WTO-led multilateral system, rather than weaken it. While these agreements provide tailored solutions for specific regions and trade partners, their effectiveness fundamentally relies on a strong, rules-based global framework. Likewise, a well-functioning WTO benefits from regional trade arrangements that foster economic integration and streamline trade processes at a smaller scale. Instead of creating fragmentation, there is a need for greater synergy between these systems—leveraging bilateral and regional agreements to strengthen multilateral trade governance, particularly through instruments like the WTO's Trade Facilitation Agreement (TFA). By aligning these frameworks and incorporating technological advancements, trade efficiency can be improved in a manner that benefits both individual nations and the broader global economy.

This essay examines three key measures that can help break down the biggest barriers to trade in developing countries:

1. Implementing the WTO's Trade Facilitation Agreement (TFA) to lower costs and streamline trade processes.
2. Harnessing trade logistics charters to commit trade actors to measurable efficiency improvements.
3. Leveraging technology through revolutionary platforms like the Trade Worldwide Information Network (TWIN) to modernise and digitise trade.

Threats to Trade Growth in Developing Countries

Developing countries face massive structural and policy-related constraints that increase trade costs and limit competitiveness. These challenges—ranging from infrastructure

gaps to bureaucratic inefficiencies—must be addressed to unlock trade-driven economic transformation. High transport and logistics costs (and times) in low-income countries increase trading expenses, making products less competitive globally. Trade documentation and border formalities that are highly bureaucratic and inefficient also contribute to the burden of trading. According to the World Bank, inefficient border procedures alone can increase trade costs by over 25 percent,[5] leading to delays to the clearing of goods which can last as long as 28 days in some ports.[a]

Limited technology-enabled processing infrastructure further restricts value addition, reinforcing raw material-driven exports structures. For instance, despite Ghana and Cote d'Ivoire producing over 50 percent of the world's cocoa, they export 70 percent of their beans unprocessed, leaving over 79 percent of the final market value in the hands of foreign manufacturers and retailers.[6] These export structures leave little room for enhancing economic benefits for over six million smallholder farmers who grow the beans.

Another growing challenge is regulatory shifts in global trade that is increasing complexities and compliance costs, particularly climate-focused policies like the European Union's (EU) Carbon Border Adjustment Mechanism (CBAM).[7] While designed to promote sustainability, CBAM, when it takes effect from January 2026, would disproportionately affect low- and middle-income countries (LMICs)[8] by imposing tariffs on carbon-intensive imports such as steel, cement, and aluminium. Mozambique, for example, relies on the EU for 97 percent of its aluminium exports,[9] making the country highly vulnerable to this policy.

Geopolitical shifts and protectionist patterns also threaten developing economies. The increasing use of tariffs as political leverage—as seen in the 2018-2019 US-China trade war, which drove up costs of impacted goods by roughly 1:1 with tariff hikes[10]—disrupts supply chains and increases global inflation. More recently, US proposals for flat-rate tariffs on all imports put programmes like the African Growth and Opportunity Act (AGOA)[b] at risk, potentially weakening Africa's trade foothold in US markets.

Finally, insecurity and regional instability further disrupt trade. For instance, the decline of democratic institutions in Africa's Sahel region, instability in the Middle East, and the conflict between Russia and Ukraine have affected trade infrastructure and contributed to global inflation. The withdrawal in January 2025 of Sahel countries, Mali, Niger, and Burkina Faso, from the Economic Community of West African States (ECOWAS) hampers the development of regional value chains, which are essential for trade growth.[11]

These factors collectively increase the time and cost of trading, making it more difficult for developing countries to scale their economies.

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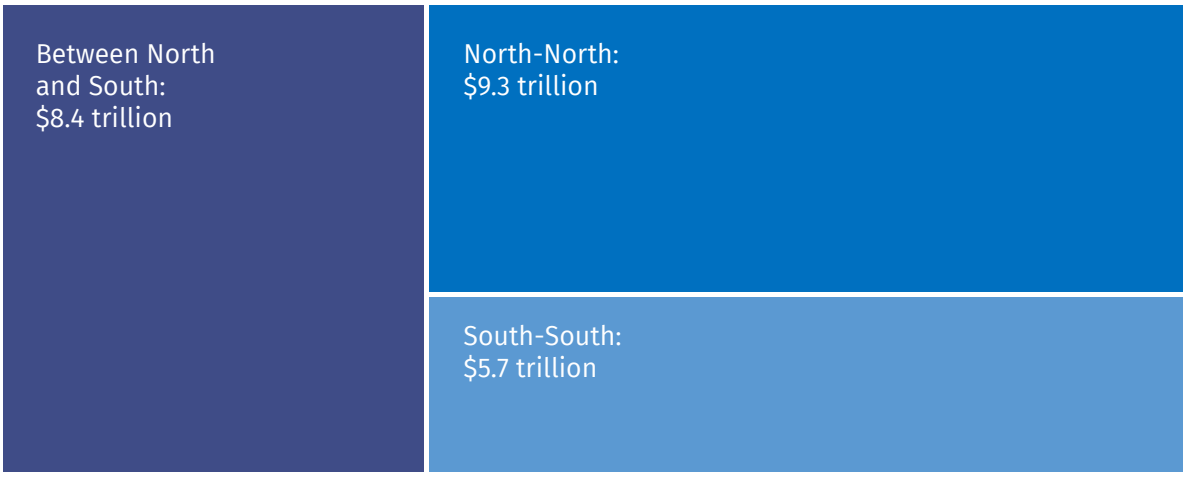
[a] Figures are taken from a 2023 Time Release Study (TRS) conducted at the Port of Banjul in Gambia. (A TRS is a process of tracking and measuring the exact time it takes for goods to be cleared and released from the moment they arrive at a country's border until they are ready for delivery, allowing them to identify bottlenecks and areas for improvement in the import/export process.)

[b] AGOA is a unilateral trade preference programme for select African countries which grants tariff-free access on certain products to the US market.

Figure 2: Trade Data: North – North, South – South, and North – South

In 2023 South-South trade was $5.7 trillion, a 7 per cent drop on 2022

Global trade flows, 2023



Source: UNCTAD, UNCTADstat.

Note: North refers to developed economies, South to developing economies. Trade is measured from the export side. Deliveries to ship stores and bunkers as well as minor and special-category exports with unspecified destination are not included.

Source: UNCTAD Handbook of Statistics 2024[12]

What Needs to be Done?

Establishing systems to streamline trade flows is crucial for success. The WTO's Trade Facilitation Agreement (TFA) was designed to facilitate trade by simplifying, modernising, and harmonising trade procedures.[13] The agreement, which came into force in 2017, has the potential to reduce trade costs by up to 23 percent for developing countries, increasing global trade by US$1 trillion annually.[14] However, implementation remains uneven. While developed countries have achieved 100-percent implementation as of 2025,[c] developing countries lag behind at 60 percent, and Least Developed Countries (LDCs) even slower at 30 percent.[15] Additionally, out of 110 ratifying members, 72—mostly from developing countries—have overdue notifications and require either additional time, technical assistance, financial support, or all three, to implement selected provisions.[16]

Beyond policy commitments, urgent action is required to translate intent into real cost and time reductions. In some developed economies, goods clear customs within hours; in certain developing countries, it takes up to 28 days. Addressing this gap requires innovative, cost-effective solutions. Beyond technical assistance support from actors like the World Bank, United Nations Conference on Trade and Development (UNCTAD), and International Trade Centre (ITC), tools such as trade logistics charters and cutting-edge digital trade solutions like the Trade Worldwide Information Network (TWIN) can be game changers. These must all be underpinned by strong political will and increased cooperation.

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[c] To access up-to-date information on the TFA's implementation progress by members, see TFAF, "Implementation progress by member", https://tfadatabase.org/en/implementation/progress-by-member

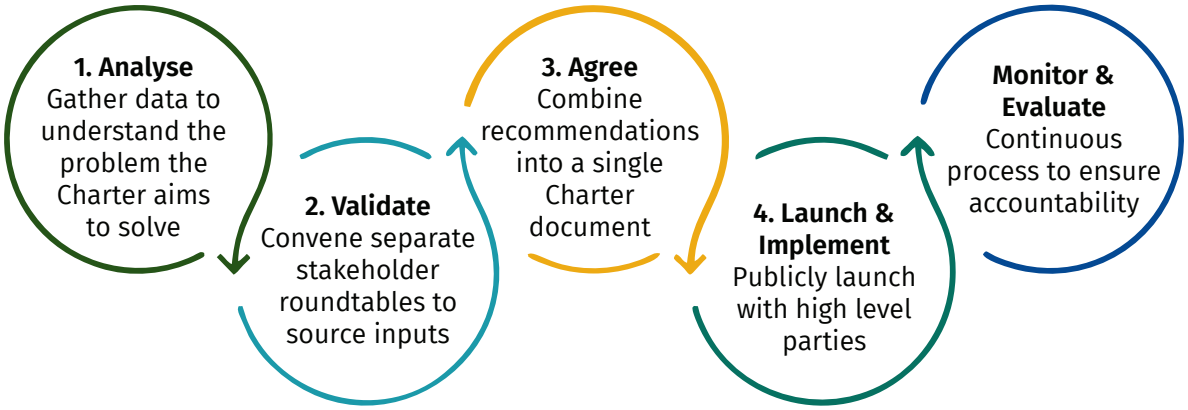
Transforming Commitments into Action Through Trade Logistics Charters

While many developing countries have established National Trade Facilitation Committees (NTFCs) to coordinate trade-related reforms, most are underfunded and lack enforcement power. To bridge this gap, governments and stakeholders can adopt Trade Logistics Charters, which transform policy intent into actionable commitments with clear targets and accountability mechanisms.

A Port Improvement Charter, for example, creates binding commitments among port authorities, regulatory agencies, and private sector actors to improve efficiency and reduce costs. Key steps in the process include a diagnostic assessment where activities such as a Time Release Study are conducted to identify inefficiencies from vessel arrival to cargo clearance; stakeholder engagement and validation workshops to agree on key performance indicators (KPIs) and set reform targets; and finally, public commitment through a launch by top political leadership, with the Charter signed by key stakeholders to ensure enforcement accountability.

Figure 3. Five Steps to Develop a Port Improvement Charter

Commitment to implementing this process will have maximum impact on reducing trade costs, fuel economic activity, and ultimately expand government revenue streams.



Source: Author's own

This approach has already yielded results. Kenya's Mombasa Port Charter transformed it into one of Africa's top-performing ports, increasing efficiency and reducing clearance time with container times reduced from 10 to four days.[17] Inspired by this, Zanzibar[18] and The Gambia[19] have since adopted similar processes.[d] Mombasa has shown that improved efficiency can unlock private investment into trade logistics infrastructure, creating a ripple effect for broader economic growth.

Harnessing Technology for Trade Transformation

To accelerate trade reforms, developing countries must leapfrog outdated processes and embrace digital solutions. Research from the *Oxford Review of Economic Policy* underscores the centrality of digital technologies in transforming industries, supply chains, and trade networks.[20] The automation of processes once reliant on low-cost labour is shifting jobs away from traditional outsourcing destinations.[e]

The Trade Worldwide Information Network (TWIN), a Distributed Ledger Technology developed in 2020,[21] has the potential to disrupt digital trade. Developed by a consortium of organisations that include the IOTA Foundation, Global Alliance for Trade Facilitation, TradeMark Africa, World Economic Forum, Chartered Institute of Exports, and The Tony Blair Institute, TWIN aims to digitally connect national trade systems across borders, replacing outdated, paper-based trade documentation with digital, seamless, secure, and transparent systems. Early evidence shows it could reduce trade costs by up to 20 percent by modernising cross-border trade procedures.[22]

Crucially, TWIN directly addresses some of the information-based provisions and mechanisms of the WTO TFA, including electronic single windows,[f] trade portals, advance ruling, and pre-clearance. It also includes procedures or programmes such as risk management, Authorized Economic Operator (AEO) programmes, and border agency cooperation, particularly at the cross-border level.[23]

Following successful pilots between Kenya and the Netherlands, efforts are underway to implement TWIN across 30 African countries over the next seven years and to set up TWIN ecosystems in Asia and the Americas.[24] As a strong South-South trade initiative, it offers a scalable model for enhancing intra-regional trade and reducing dependence on developed world-centric trade logistics.

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[d] They are being supported by the Tony Blair Institute (TBI), with which this author is affiliated.

[e] In the US, for instance, recent AI-driven automation has replaced over 10,000 hours of lemon-squeezing labour in Chick-fil-A fastfood restaurants, signalling the future of labour-intensive work.

[f] Single windows are platforms that enable users to submit transit-related customs documentation through a single online interface as opposed to disparate websites or paper forms.

Strengthening Trade Cooperation and Political Will

At the core of all these solutions lies political will and strategic cooperation, particularly among developing nations. While multilateral trade systems are ideal, the reality of a fragmented global trade order requires bolder action from governments in the Global South—this includes prioritising South-South trade cooperation over dependency on developed economies.[25,26]

The African Continental Free Trade Agreement (AfCFTA) exemplifies this shift. Once fully implemented, the AfCFTA is projected to boost intra-African trade by over 50 percent, by some estimates lifting 30 million people out of poverty and increasing Africa's GDP by US$450 billion by 2035.[27] However, realising these benefits requires stronger coordination, infrastructure investments, and effective implementation of trade-friendly policies.

Many transformational opportunities can be realised through stronger political will. For example, Africa's Grand Inga Dam project in the Democratic Republic of the Congo could generate 44,000 MW of hydroelectric power—enough to supply 40 percent of Africa's energy needs.[28] However, despite being launched in 2013, the project remains stalled due to political fragmentation and lack of coordinated investment. Similar untapped prospects exist across sectors, reinforcing the need for greater leadership and commitment to regional cooperation.

Conclusion: From Intent to Impact

Good intentions and commitments alone will not drive change—deliberate action, technology-driven solutions, and strengthened regional cooperation are necessary to transform trade in developing countries. Trade Logistics Charters can drive domestic efficiencies, while TWIN offers a digital pathway to streamline cross-border trade. Yet, none of these solutions will work without bold leadership, policy enforcement, and a commitment to greater global and regional economic cooperation.

For developing countries, the way forward is clear: leverage existing multilateral frameworks, modernise trade processes, and deepen South-South trade cooperation. The WTO was built on the foundation of shared prosperity and open trade—in an era of fragmented global trade governance, developing countries must take bold and urgent steps to chart their socioeconomic transformation pathways.

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The Energy Transition and Climate Change: A Global South Perspective

Lydia Powell

The belief that once science has established a limit to temperature increases, every nation will optimise activities to meet the goal has proven to be inaccurate.[1] Since the Kyoto Protocol was signed in 1997, carbon emissions from energy use have increased from about 22 billion tonnes (BT) to over 35 BT in 2023 with significant but short-lived reductions recorded only during the financial crisis of 2007-'08 and the COVID-19 pandemic in 2020-'22.[2] Among the reasons are the divergence in priorities of the Global North and the Global South, and the absence of scalable and abundant energy sources that simultaneously meet the strategic priories of affordability, security, and sustainability in developing countries.

In the last 150 years, the Global North has enjoyed the benefits of higher greenhouse gas (GHG) emissions, particularly carbon emissions, in the form of higher living standards which, in turn, result in higher per capita carbon emissions.[3] The Global South, a victim of colonial exploitation and the resulting underdevelopment is however constrained in following the same path.

In 2023, the global average per capita energy consumption was about 77 gigajoules (GJ),[4] more than the minimum energy required for decent living.[5] In a 2024 study of 90 countries and regions that cover most of the world's population, 33 were found to have energy consumption below 77 GJ.[6] In the African continent, the average per capita energy consumption is 14 GJ.[7] Roughly one-seventh of the global population, mostly in the Global South, live without electricity altogether[8] or else with inadequate and irregular supply, and about one-third continue to rely on traditional cooking fuels such as firewood.[9]

The rest of this article will highlight the challenges in energy transition in the Global South.

Fuel Choices for Power Generation: India and Brazil

The energy choices of populations in India and Brazil offer insights on how a country's domestic constraints and strategic priorities influence and complicate the pace of energy transition in the Global South. In India, fossil fuels accounted for 76.5 percent of power generation in 2023-24 while non-fossil fuels (including hydro and nuclear) accounted for the remaining 23.5 percent.[10] These choices reflect the country's strategic goals of affordability, security, and sustainability: Coal offers affordability and security, at the cost of sustainability and global carbon emission reduction targets; renewables offer sustainability, at the cost of affordability and security; natural gas plays only a marginal role though it can potentially offer some degree of sustainability as it compromises on the two critical domestic goals of affordability and security.

Brazil, meanwhile, generated 91 percent of its electricity from clean sources in 2023, with hydro dominating the mix at 60 percent. Brazil's per capita carbon emissions are well below the global average.[11] In 2023, it had the second-lowest carbon intensity of electricity generation among the G20 member states, and it has already surpassed its target of reaching 84-percent renewable electricity by 2030.[12] Yet, oil and natural gas production accounted for most of the increase in domestic energy production in Brazil in the last decade.[13]

The dominant fuel choice for power generation—coal in the case of India and hydropower for Brazil—are driven by domestic resource endowment, a mere accident of geography, which makes their respective fuel choices the most affordable while maximising energy security. In the Global North, strategies for reindustrialisation that justify trade barriers are conflated with carbon emission reduction which decreases affordability and increases the carbon reduction burden on the Global South.

Enabling Just Transitions: South Africa and India

Coal continues to be the dominant fuel for power generation in India and South Africa. South Africa's experience in phasing out coal illustrates the complexities of the energy transition. South Africa was the largest economy in sub-Saharan Africa in 2023, in terms of GDP.[14] In 2023, fossil fuels (mainly coal) accounted for over 82 percent of total power generation, and the rest was from non-fossil fuels.[15] While the fuel options to diversify South Africa's electricity mix are available, the affordability of electricity supply is a constraint on diversification.

At the United Nations Conference of the Parties in November 2021 (COP26), the G7-led Just Energy Transition Partnership (JETP)[a] announced that it will provide an initial commitment of US$8.5 billion towards financing South Africa's decarbonisation efforts.[16] Described as a "revolutionary" agreement for decarbonisation in the Global South, the JETP was signed by South Africa, Indonesia, Vietnam, and later by Senegal.[17] Ninety percent of the finance package was allocated for electricity sector reforms through traditional development finance institutions of the Global North and the remaining 10 percent was for core just transition objectives.

Part of the JETP is REIPPPP, the Renewable Energy Independent Power Producer Procurement Program, which has succeeded in attracting private sector investment in renewable energy projects.[18] A less successful component of JETP, however, is the effort to shut down the Komati Power Station, South Africa's 63-year-old 1,000-MW coal-based plant located in Mpumalanga. The "repurposing" project, heralded as one of the largest globally, allocated US$497 million for the conversion of the plant into a renewable energy generation site.[19] When Komati was "repurposed", however, many were left without work; it was devastating in a country where unemployment is at over 30 percent.[20] For the labour force in the coal sector, the immediate rewards of gainful employment are preferable over delayed gratification in the form of benefits of climate action—a concept known in economics as 'temporal discounting'.[21]

Overall, the Global South (including China) accounted for over 84 percent of global coal consumption in 2023.[22] In the Global South, 26 countries (excluding China, India, and Indonesia) invested in coal-based power generation capacity after signing the Paris Agreement.[23] Of these, five invested in coal-based power generation capacity for the first time.[24] The key factor that influenced the decision to invest in coal was affordability.[25]

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[a] The partnership that involves the governments of South Africa, the United Kingdom, the United States, France, and Germany, and the European Union.

Decarbonising Road Transport: The Case of Biofuels in Brazil and India

In India, electrification rates in road transport are impressive only in the two-wheeler (2W) and three-wheeler (3W) segments that receive subsidies under a government programme designed to promote electrification.[26] Although 2Ws have a share of over 70 percent in vehicle numbers, 4Ws dominate fuel consumption.[27] This means that decarbonisation of the 2W segment will have limited effect on overall fuel consumption patterns.

To accelerate the decarbonisation of road transport, India has revived its programme for blending ethanol with petrol, setting specific target dates for achieving ambitious blending rates.[28] By 2025, the government aims to achieve ethanol blending of 20 percent. In 2024, around 98 percent of road transportation fuel in the country came from fossil fuels and 2 percent from biofuels.[29] The Global Biofuel Alliance (GBA) proposed by India aims to establish a global partnership of national governments, agencies, industries, and other stakeholders to advance sustainable biofuels technology deployment and expand sustainable biofuels market penetration.[30]

Brazil, for its part, is the world's second-largest ethanol producer, behind the United States as well as the third-largest biodiesel producer.[31] A crucial challenge in India's attempt to replicate Brazil's success in biofuel production and use is resource endowment, particularly land and water. India's arable land per capita is only one-third of that in Brazil,[32] and Brazil has 25 times India's per capita renewable water resources.[33] The unintended consequences of the ethanol blending programme in India, such as the import of corn and ethanol, illustrate that the goals of decreasing fuel imports, reducing carbon emissions, and increasing farmer incomes cannot be achieved simultaneously. Even in Brazil, the production of biofuel crops—especially crops for the production of first-generation bioethanol and biodiesel—have had negative impacts on the environment, particularly through land use change and deforestation.

Closing the Cooling Gap

According to the World Meteorological Organization (WMO), 2024 was the warmest year ever recorded in human history: the average global temperature for the year exceeded 1.5°C above the pre-industrial baseline for the first time, breaching the threshold set by the Paris Agreement.[34] Indeed, above-average temperatures have become the norm in the last decade with exceptionally hot summers across the world. In this context, the lack of essential indoor cooling in most parts of the Global South, a dimension of energy poverty, is a cause for concern.[35]

The "cooling for all" initiative[b] observes that at least 3.43 billion people still faced cooling access challenges in 2021,[36] including 1.09 billion rural and urban poor at high risk, and 2.34 billion lower-middle-income people at medium risk. Access to space cooling (air-conditioning or AC) in the Global South is a climate change adaptation measure that requires as much

[b] Sustainable Energy for All is an independent organisation, hosted by UNOPS (UN office for project services), with a global mandate to accelerate progress on the energy transition in emerging and developing countries.

attention as carbon mitigation measures as access to space cooling can save thousands of lives. There is concern that AC use will increase the demand for energy that can increase peak electricity demand, increase carbon emission if the electricity is generated using fossil fuels, affect electricity systems stability, and in turn, increase household spending on energy at the expense of other vital expenditure. According to estimates, a 1°C increase in temperature in the future will increase electricity consumption for space cooling by around 15 percent.[37] India, which has more than 3,000 CDDs (cooling degree days)[c] consumes just 70 kilowatt hours (kWh) for space cooling compared to 800 kWh in South Korea that has only 750 CDDs.[38] This disparity is mainly on account of low affordability of AC use in India.

Even if all theoretically possible efficiency gains are achieved, AC use is likely to remain the privilege of the affluent and aspiring classes. In India, the per capita carbon emission of the lowest 50 percent of the population is 0.9 tonnes of CO2 equivalent (tCO_2eq) and 1.2 tCO_2eq for the middle 40 percent; the per capita emission is 9.6 tCO_2eq for the top 10 percent.[39] AC use that consumes more electricity than all other electrical equipment in a typical affluent household in India accounts for a large share of the CO_2 emissions of the top 10 percent.[40]

In theory, there is recognition that funds should be allocated for efficient cooling. The Kigali cooling efficiency program (K-CEP) recognises financing needs for access to cooling but this recognition remains limited given that financing needs continue to be poorly defined and tracked globally.[41]

Conclusion

For progressive outcomes, climate action needs to (i) reconcile with the overarching aspiration in the Global South to catch up with the Global North, economically and politically; (ii) acknowledge the significance of domestic energy resources for energy security and affordability; (iii) balance the emphasis of investments in mitigation action of the Global South with adaptation needs of the Global South; (iv) formulate technology and fuel agnostic strategies that can pave the way for a low-carbon future; (v) assess country-level climate action on the basis of qualitative parameters that reflect the right to human well-being; and (vi) reduce trade barriers on low-carbon technologies to increase affordability and accelerate the energy transition in the Global South.

[c] A "cooling degree day" is a measure of how many degrees a day's average temperature is above a set "base temperature" (typically 18°C), essentially indicating the cooling demand for that day; if the average temperature is below 18°C, the cooling degree days for that day are considered zero.

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The Future of Fossil Fuels in a Decarbonising World

Mannat Jaspal

Across the globe, energy transition policies are reshaping the role of fossil fuels in the energy mix and redefining the relationship between economic growth and carbon emissions. At the heart of the ongoing discussions are perspectives that see advantages in both, delaying the phase down of fossil fuels, and accelerating innovation leadership in clean energy technologies.

The European Union (EU), a leader in climate regulation, is implementing a carbon border adjustment mechanism (CBAM) to price and tax carbon emissions entering its borders. Meanwhile, in the United States (US), the Trump administration is advocating for fossil fuel, referring to it as "liquid gold."[1] His "drill, baby, drill"[2] rhetoric has prompted other countries to consider how to balance their decarbonisation commitments with energy security, economic competitiveness, and development goals.

Despite different starting points, all countries today are aiming for the same core menu of energy transition solutions: energy efficiency first, then renewable electricity supply and energy end-use electrification, then indirect electrification for intensive energy loads by means of green hydrogen or its derivatives, and finally, carbon removal by both natural means (trees) and technology (carbon capture and storage).

Energy transition today is poised between these perspectives. On the one hand, oil, coal, and natural gas still provide around 80 percent of global primary energy.[3] On the other, of a total US$3 trillion of investments in energy in 2024, US$2 trillion flowed to clean energy technologies and infrastructure.[4]

Key Considerations in Energy Transitions

Technological Factors

Solar and wind have emerged as powerful and cost-effective alternatives to fossil fuels in various economic sectors. However, their variable nature and intermittency requires that they are partnered with large grids that enable balancing, plus with power storage technologies. Battery energy storage systems (BESS) are crucial to enable energy demand peaks and supply surpluses to be managed for short timeframes. Longer-duration energy storage solutions include hydroelectric dams and various thermal technologies. Other clean energy technologies can provide steady (baseload) and/or dispatchable outputs, most notably nuclear power, geothermal power and heat, and run-of-river hydroelectricity.

Improving energy efficiency, decarbonising the electricity sector, and scaling electrification of key energy and use processes in building heating and cooling, passenger and short-haul transportation, and low-temperature industrial heat processes may be the lowest-hanging fruits in the energy transition landscape.

The transportation sector has been one of the biggest clean-tech growth areas with the rise of electric vehicles (EV). However, while EVs have won the technology race in short-haul and passenger transport, there is less certainty about which technologies will dominate in long-haul trucking, and the shipping and aviation sectors, where weight and distance require more energy-dense fuels.[a,5]

Similarly, transitioning extremely high-temperature processes in parts of industry is challenging, typically where temperatures over 600 degrees centigrade are required.[6] Many industrial processes fall below this threshold, and can be supplied by geothermal, for example. For hard-to-electrify processes, however, there are limited commercialised and scalable technological alternatives whose associated capital costs are high.[7] For example, in the cement industry globally, nearly half of the emissions come from the decomposition of limestone to lime and CO_2,[8] although there are credible technology roadmaps to achieve carbon-neutral cement production in Europe by 2050.[9] Alternative solutions for these use cases include carbon capture and storage (CCS), hydrogen, and sustainable biofuels, all of which have risen in prominence in policy debates in recent years. For example, where some processes continue to emit CO_2, in G20 countries at least 95 percent of these emissions need to be captured by means of CCS by 2030.[10]

A number of these technologies are off-track to deliver in line with climate targets. The gap between current progress and the required deployment of low-carbon technologies is significant[11]—of the technologies that need to be deployed by 2050, the best results so far are mainly in less complex and more commercially viable applications, led by solar PV. In contrast, the CCS project pipeline may be higher on paper, but the majority of projects have not reached final investment decisions (FID), putting their realisation at risk.[12] In the case of hydrogen, to meet 2030 targets, clean hydrogen production must increase 25 times in Europe and almost 20 times in the US over the next five years.[13] Similarly, in sustainable aviation fuel (SAF), only around 25 percent of capacity envisaged until 2030 has reached FID in Europe, and in the US, 30 percent.[14]

On the other end of the spectrum, fossil fuel companies are leveraging technological innovations to reduce fugitive emissions and to improve energy efficiency. For example, advancements using satellites and Artificial Intelligence (AI)[15] are improving methane leak detection and resolution. The electrification of mining equipment, drilling fleets,[16] and fracking units is helping to curtail carbon emissions to a certain extent.

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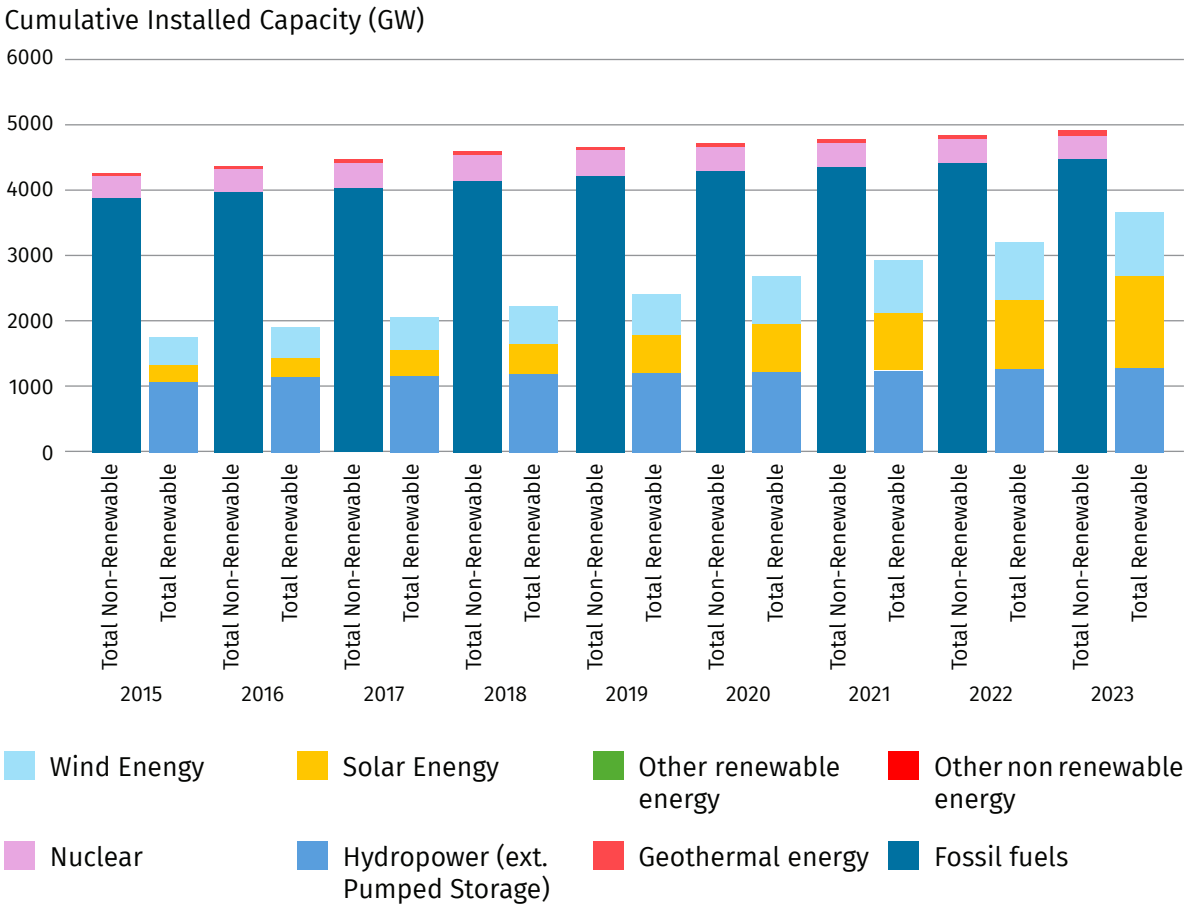
[a] Diesel fuel contains 40 times as much energy as battery.

Figure 1: Global Power Capacity, by Technology (2015 - 2023)



Source: IRENA Renewable Energy Statistics Data[17]

Political Considerations

The political momentum for climate action, carbon neutrality, and international cooperation on energy transitions has been unprecedented since the historic 2015 Paris Agreement, ratified by over 195 parties[18] and covering 90 percent of global emissions.[19] The 107 countries responsible for 82 percent of global greenhouse gas emissions (GHGs) have committed to net-zero either in law, in a policy document, or in an announcement by a head of government or senior government official.[20] This policy signalling has encouraged more than 9,000 companies, 1,000 cities, and 600 financial institutions to join the 'Race to Zero' pledge, with the aim of halving their global emissions by 2030.[21] These commitments, however, are being made according to different timeframes, depending on their stage of development and strength of policy and regulatory signalling.

The industrial policies of many countries today—such as the European Green Deal, the US Inflation Reduction Act, and India's Atmanirbhar Bharat—are all aimed at spurring domestic manufacturing and establishing stronger market leadership in clean energy, and making energy transition technologies pillars of their economic agendas. Large-scale infrastructure initiatives like China's Belt and Road Initiative also include energy projects in their portfolio of international investments—energy accounts for 46 percent of China's investments in the MENAT region (Middle East and North Africa plus Turkey), exceeding US$126 billion between 2005 and 2022.[22]

It is therefore not surprising that many hydrocarbon-exporting countries, such as the Arab Gulf states which are heavily reliant on fossil exports for revenues, are looking to diversify and explore cleaner energy alternatives. The United Arab Emirates and Saudi Arabia, for example, have made notable domestic investments in renewable energy and hydrogen production,[23] and are emerging as capital providers of energy transitions in other geographies. Their aims include becoming more energy self-reliant, as well as managing their exposure to changes in global market demand for fossil fuels and/or the effects of carbon tariffs and sustainability regulations. Nonetheless, as of 2024, in the Middle East, only 20 cents are allocated towards clean energy investments for every 1 USD invested in fossil fuels.[24] Announced pledges indicate that by 2030, this ratio is expected to increase to 70 cents.[25] Globally, in order be on-track for net-zero emissions by 2050, annual investments in oil, coal and gas will have to fall more than half, from just over US$1 trillion in 2024 to below US$450 billion per year by 2030.[26]

Meanwhile, clean energy and climate security, risks, and geopolitics are rising issues for diplomacy between states. Bilateral and multilateral trade agreements contain important chapters on clean energy—for example, over the last half decade, India and the EU, and also India and the US have strengthened their bilateral cooperation on clean energy through various agreements, including initiatives on renewable energy, energy storage, and grid modernisation.[27] Most recently, the US-India partnership has expanded under Trump 2.0 to include a focus on oil and liquefied natural gas (LNG), reinforcing energy security while facilitating a transition towards lower-carbon fuels.[28]

Energy security is a pressing concern for many countries around the world, especially in the Global South. But energy security has different, interlinked, notions: the availability of energy supply, the cost of energy to consumers and to the economy as a whole, the resilience of energy systems against external shocks including extreme weather events caused by climate change, and issues of national security or dependency. The availability of affordable energy is a central issue: 685 million people worldwide still lack a reliable energy source,[29] undermining health, education, and economic development. Most of these populations rely on traditional biomass fuels, and "access" does not need to come from coal power—particularly in rural areas, it will be often faster and cheaper to achieve by means of solar micro-grids, CNG gas cooking systems, and waste-to-energy units.

The war in Ukraine, its impact on gas markets, and the use of energy sanctions by the EU and US demonstrate how rich countries can weaponise energy. This, in turn, strengthens the case for energy transitions. However, similar problems also emerge in the case of critical minerals and supply chains that are crucial for clean energy proliferation. The concentration of critical mineral resources in a few countries poses a serious threat to energy transitions worldwide. For instance, in early 2025, in a stand-off with the United States, China imposed a ban on exports of gallium and germanium metals that are needed for electronics and semiconductor manufacturing.[30]

Just and inclusive transition policies are another important political dimension of the energy transition. These strategies should support and retrain displaced fossil fuel workforces, equip the next generation of workers with clean energy skills, and protect vulnerable consumers—both energy-poor households and industries highly sensitive to energy prices—against price shocks caused by fossil fuel global market volatility as well as upfront investment costs of clean energy.

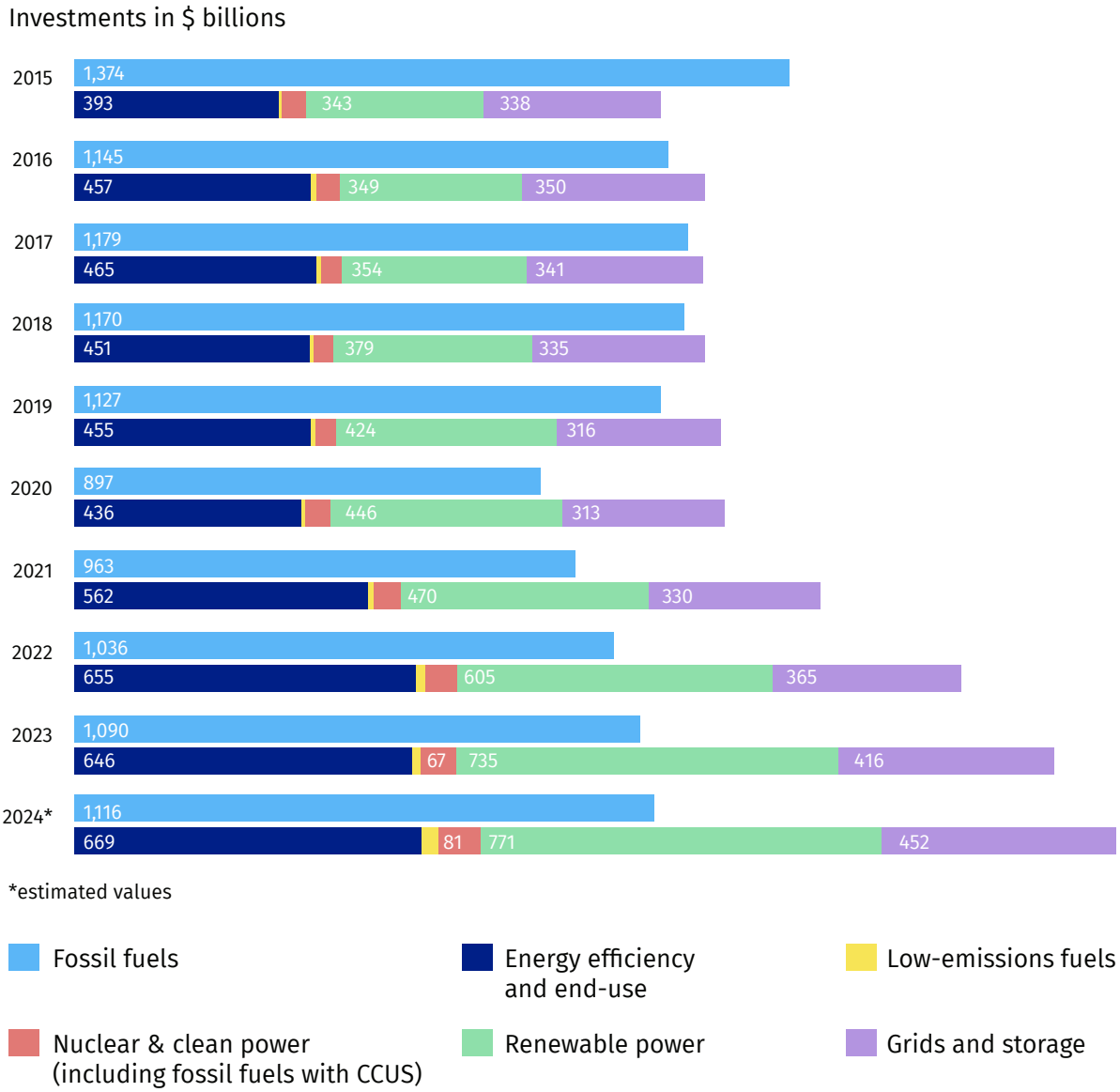
The current "mid-way" stage of the energy transition is therefore not simple. Fossil fuels remain a huge factor in global trade, geopolitics, and macroeconomics. Sometimes crisis circumstances are forcing countries to revise policy decisions—for example Germany's decision in 2022 to temporarily suspend coal power plant closures in the wake of gas shortages.[31]

While many governments and policymakers are tempted to treat climate and energy transition goals as long-term problems which they can avoid tackling with bold decisions today, this tendency does not help businesses to plan ahead, often causing frustration that is sometimes publicly expressed and at others, privately communicated. Without appropriate policy signalling from governments, it is difficult for any business to be confident about the financing and value chains on which their transition strategies depend. This uncertainty delays investments and innovation moving from the brown to the green. The political landscape of energy transitions must therefore balance energy security, affordability, reliability, and industrial competitiveness alongside sustainability and clean energy transitions.

Financial Imperatives

Current investments in clean energy are twice as much as those in fossil fuels (see Figure 2).[32] Wind and solar PV yielded 2.5 times more energy output for each dollar invested than a dollar spent on the same technologies only a decade earlier.[33] The growth in clean energy investments can be attributed to strong policy signalling, technological advancements, increasing competitiveness of renewables, and energy security imperatives. At the same time, the uncertainty from fossil fuel investments is increasing owing to the financial risk of stranded assets.

Figure 2: Global Investments in Clean Energy and Fossil Fuels (2015-2024)

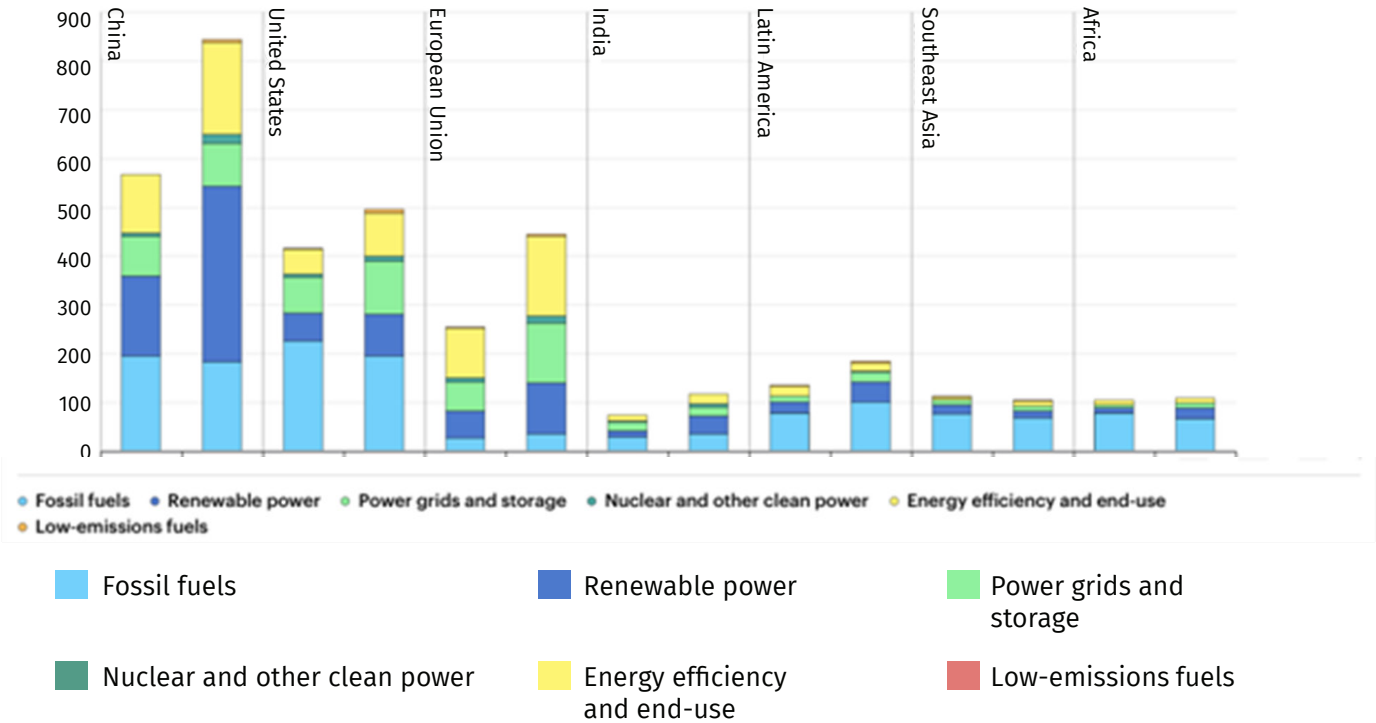


Source: "Who is funding fossil fuel expansion?"; World Energy Investment 2024[34]

However, the lion's share of these investments still resides in advanced economies (see Figure 3) with only 15 percent of global clean energy spending taking place in Emerging Markets and Developing Economies (EMDEs) outside China.[35] For instance, for every dollar invested in battery storage in advanced economies and China in 2023, only one percent was invested in other EMDEs.[36]

Figure 3: Annual Investments in Clean Energy, Select Countries and Regions (2019-2024)

billion USD (2023, MER)



Source: World Energy Investment 2024[37]

These patterns will not result in a global energy transition: the future emissions will mostly emanate from developing countries which are yet to fully industrialise and are facing rising energy demand. Ensuring that investment flows into these countries is essential.

The fundamental problem is that developing countries are burdened with a higher cost of capital—typically, their financing costs at least twice that in advanced economies.[38] It is well understood that this cost difference is owing to often misplaced sovereign and political risk assessments. Credit rating agencies are also following antiquated methodologies without adequately accounting for the changing realities of developing economies, or for the local conditions which local ratings agencies are better placed to understand and price. The lack of local currency lending for clean energy also pushes up borrowing costs for EMDEs, making hedging costs completely unaffordable and unviable, pushing least-developed countries towards unsustainable debt. Additionally, it is important to realise that the majority of the investments in EMDEs are made from a public source, either the government or state-owned enterprises, compared to just 15 percent in advanced economies.[39]

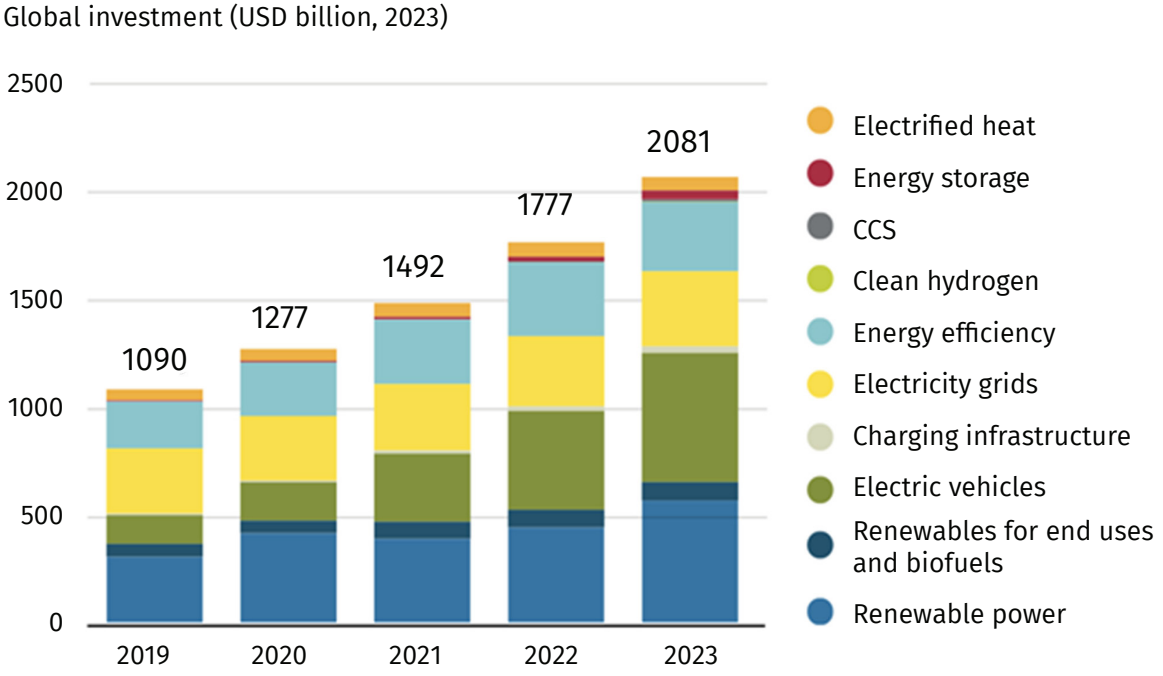
Financing costs also, tragically, reflect climate risks and the disproportionate impact of such risks in many developing countries. This leads to a premium on capital borrowed by the very countries most vulnerable to climate change and most urgently in need of access to clean energy investment. The type of finance available in EMDEs also reflects investment biases—debt financing is prominent in the power sector in Asia, while equity

shares dominate the fuel supply, particularly in the Middle East and Eurasia.[40] In such scenarios, it becomes increasingly difficult for Global South countries to escape from dependencies on fossil fuels.

Global investments in energy transition technologies (see Figure 4) will have to be ramped up to meet global net-neutrality targets. By 2030, investments in renewable energy—power generation, grids, and storage—will have to double in order to triple renewable capacity as targeted.[41] Simultaneously, investments in low-emission fuels must grow tenfold, while the rate of energy efficiency improvements must double.[42] Between 2024-2030, annual investments in renewable power, grids and flexibility, energy efficiency and conservation must increase almost four times to US$4.5 trillion each year from US$1 .29 trillion in order to meet the goals of the UAE Consensus.[b,43]

While there is a business case for certain mature technologies, notably solar PV, for the immediate future—other clean energy technologies will have to rely on regulatory support and concessional financing mechanisms to ensure off-take and scale. Delivering an energy transition that meets global and national targets is not a chicken-and-egg problem—conscious and prudent investments in these crucial clean energy technologies will have to lead the way. If investments lag, innovation and manufacturing advancements will stagnate, derailing progress and jeopardising targets.

Figure 4: Global Investment in Energy Transition Technologies (2019-2023)



Source: World Energy Transitions Outlook, 2024[44]

[b] The UAE Consensus calls on all UNFCC parties to triple renewable energy capacity and double the rate of energy efficiency improvement by 2030. See https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2024/Nov/IRENA_World_energy_transitions_outlook_2024.pdf

Conclusion

The energy transition is a highly complex endeavour that requires a just and pragmatic approach. While the proportion of fossil fuels in the energy mix will decline, they will not disappear entirely—even in net-zero scenarios, a portion of energy demand will still be met by fossil fuels. Demand for fossil fuel, including oil, natural gas and coal, is expected to plateau but will continue to account for anywhere between 40 and 60 percent of the total energy demand in 2050, down from 78 percent in 2023.[45] The duration of the plateau and the extent of dependence on fossil fuels will depend on a combination of factors—technological breakthroughs and scale up; geopolitical shifts; the clever design of policy incentives and regulations to support innovation and investment; energy security imperatives; financial innovation and market-based mechanisms; and international cooperation. Governments, the private sector, investors, and civil society must all work in close consort to overcome the technological constraints, political bottlenecks, and financial gaps as discussed in this article.

1. Inclusivity

Achieving climate action goals requires both an "all technologies on deck" approach as well as "all parties on deck" strategy. Investments in renewable energy sources, energy efficiency, sustainable fuels, and clean hydrogen will be critical to support maximum decarbonisation, along with CCUS and nuclear energy. Although the last two iterations of the Conference of the Parties (COPs) in the UAE (2004) and Azerbaijan (2005) faced a backlash for being hosted by major oil-producing countries, meaningful action on climate and energy transitions cannot be achieved in isolation. Instead, all countries, particularly those with deep pockets of fossil fuel revenues, must be mobilised.

2. Policy Certainty

Well-designed government policies are essential to ensure modern energy access to all, to give businesses confidence to invest, and to influence consumer perception and behaviour which will promote the uptake of rooftop solar installations and building efficiency upgrades, electric vehicle purchases, and circular economy practices of repair and recycling. Implementing carbon pricing, subsidies for renewables, tax credits, product mandates and stricter emissions regulations are all essential policy signalling mechanisms for both industry and investors. Furthermore, a skilled workforce will be key to the success of the energy transition. Throughout the economy, robust climate risk modelling should be undertaken, including both adaptation risks and policy risks.

3. Scaled-up Infrastructure and Financing

Scaling renewable and nuclear and grid infrastructure projects, along with expanding energy storage solutions is crucial. Development finance institutions and multilateral development banks need to move beyond discussions about blended finance to making actual de-risking investments in early-stage projects and to attracting private investment via guarantees and first-loss capital. While these efforts are underway, a massive degree of scaling up is needed.

Transition finance mechanisms, supported by harmonised policies and credible standards, must scale up to enable high-emitting sectors to decarbonise. Rating metrices must also be reviewed, having so far disadvantaged developing countries with a premium on capital.

4. International Cooperation

An inclusive, cooperative and equitable approach will be essential to build consensus and momentum to collectively achieve the global climate goals. Platforms such as the G20, BRICS, the new collaborative efforts IMEC and I2U2[c] can be leveraged to reinforce as well as ringfence the energy transition agenda from geopolitical rifts as well as changes in government. The latter becomes particularly important in light of recent pronouncements by Trump[46] withdrawing the United States from the Paris Climate Agreement, and halting climate investments previously approved by his predecessor as part of the IRA. International agreements and partnerships must prioritise clean energy financing, carbon markets, and technology transfer to accelerate decarbonisation across regions, while fostering industrial partnerships and promoting harmonisation and inoperability of standards and investment methodologies.

[c] G20 is an international forum of 20 nations that seeks to find solutions to global economic and financial problems. See https://g20.org. BRICS, which stands for Brazil, Russia, India, China, and South Africa, (as well as 5 new members) is an informal group of emerging economies that focuses on economic development. See https://www.cfr.org/backgrounder/what-brics-group-and-why-it-expanding. IMEC, which stands for India-Middle East-Europe Economic Corridor, is a proposed trade and connectivity initiative that aims to enhance economic integration in the area. See https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2052486. I2U2 is an intergovernmental strategic partnership of India, Israel, UAE, and USA, which focuses on economic cooperation in sectors such as water, energy, food security, health, technology, and space. See https://www.state.gov/i2u2

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Navigating the Entanglements in the U.S.-China Quantum Technology Race

Linda Nhon and Andreas Kuehn

Trump 2.0's overall policy directions in critical and emerging technologies will likely hew to common expectations. The details, however, of what technologies the new administration will prioritise and how actions, such as tariffs and export controls for example, will affect the United States' (US) innovation and technology leadership remains underexplored.

The US administration will continue a hardline stance on China's access to cutting-edge technology, even as the US and its allies, on one side, and China on the other, remain intertwined in relevant areas of science and technology. Moreover, in the case of quantum technologies, there are significant and extensive dependencies on China. Such technological, scientific, and geopolitical entanglements of the two countries in the field of quantum information science and technology (QIST) begs the question: How can the US rapidly advance its position in the field, at least in the short term, given China's control, especially over critical quantum materials?

This article seeks to provide an overview of the current technical and geopolitical hurdles that will confront the United States in the near future as it pushes for quantum supremacy. It outlines the emerging classes of materials needed to reach those goals.

2025 is anticipated to be a big year for QIST, not only in the US but globally. The United Nations has declared 2025 as the International Year of Quantum Science and Technology in celebration of the 100th year of modern quantum mechanics. On the home front, the National Quantum Initiative Reauthorization Act is expected to pass, with US$1.8 billion in appropriations over five years from FY 2025-2029.[1] The bill aims to establish and fund new quantum research centres, workforce training hubs, quantum testbeds, and quantum standards; it will be overseen by the US Department of Energy (DOE) and the National Science Foundation (NSF), with assistance from the National Institute for Science and Technology (NIST) and the National Aeronautics and Space Administration (NASA). In addition to NQIA's funding, the Chips and Science Act, if the funding gets appropriated, will also provide coverage for QIST research across the agencies.[2]

As the international scientific community advocates for research collaboration, the US is increasingly decoupling from China on geopolitical grounds. Yet China's recent research achievements rival, if not surpass, those of the US.[3] After some delay, the US renewed its Science and Technology Cooperation Agreement (STA) with China in December 2024 for another five years; the narrowed-down pact covers basic science but excludes collaboration on critical and emerging technologies.[4] The US might have little choice but to depend on China as the field of QIST advances. After all, China is home to, and seller of critical elements necessary for developing the next-generation quantum technologies, especially for sourcing these materials and advancing QIST fundamental scientific research.[5]

QIST: An Overview

Quantum Information Science and Technology (QIST) is an interdisciplinary field that focuses on understanding and manipulating the quantum nature of matter (i.e., its dual wave-particle behaviour) and its research can lead to new technologies like quantum computers, communications, and sensors, among others. Particles such as photons, phonons, and electrons are usually the test subjects for QIST research. These particles can exhibit superposition and entanglement, both underpinned by a phenomenon known as coherence[a] or, on the flip-side, weakened by decoherence; these quantum properties, if they can be controlled and fine-tuned, will result in unique capabilities.[6,7] Increasing computational speed, breaking communication encryption, and enhancing detection of chemical analytes are a few disruptive capabilities. Different approaches—including designing chemical structures, engineering instruments, coding quantum algorithms—are being employed to improve the understanding of the qubits' behaviour. Today, extensive fundamental research and new quantum materials are necessary in order to realise the potential technological disruptions and societal impacts; in other words, to bring quantum computing, in particular, to practical applications at scale.

Each quantum subdomain comes with its own set of scientific and engineering challenges. The commercially available quantum computer, for example, hosted by D-Wave, is using superconductors that require -264°C to be operable. On the Kelvin (K) scale, that temperature would be 9K, which is close to as cold as it gets. Absolute zero (0K or -273 °C) is the lowest possible temperature at which molecular motion comes to a stop. Reaching this temperature requires highly specialised laboratories and is a resource- and cost-intensive process. Even proposed scalable fabrication approaches rely on these conditions.[8] In addition to the ultra-cold challenge, error correction and scalability are major parameters that are being optimised. Error correction refers to techniques (e.g. codes) used to protect quantum information stored in qubits from propagating errors caused by interference. By managing the number of errors that occur in the system, there is a higher chance for scalability—increasing the number of qubits, and in turn, logical qubits, in a system in order to solve more complex problems.

As recently as November 2024, Google's Quantum AI's team achieved a milestone with its latest superconducting processor, "Willow", where its system maintained below-threshold performance when decoding in real-time.[9] They demonstrated that they could drive errors down while scaling up the number of physical qubits, which is a minimum criteria for moving towards scalable fault-tolerant quantum computers.[10] While this achievement is significant for a field that has been working on this problem for the past 30 years, the authors of the paper recognise the real-world challenges of scaling this technology, "although we might in principle achieve low logical error rates by scaling up our current processors, it would be resource intensive in practice."

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[a] 'Coherence' is broadly defined as a quantum property that describes the relationship between two waves that are well defined, having the same phase and amplitude; and their correlations between the wave are preserved over space (spatial) or time (temporal). On the other hand, the process of losing coherence, often through interference, is known as decoherence.

Similarly, quantum communications networks that must retain entanglement across long distances and not propagate error during teleportation also require temperatures close to absolute zero. The real paradigm shift, however, involves deploying these technologies across numerous sectors—such as finance, energy, military, and healthcare—and they will need to, at a minimum, overcome the temperature constraint. As scientists try to probe deeper into understanding fundamental quantum properties like increasing coherence time (T_2) and reducing decoherence rates, they are also trying to create long-term stable qubits at ambient room temperature (293K or 20°c), the holy grail for engineers and scientists alike. This feat is not trivial.[11] As of October 2024, a team of American researchers using a sophisticated vanadyl porphyrin, holds the world record for longest T_2 of a fully saturated array of molecular qubit at room temperature with a modest time of 31 ns.[12] For comparison, the longest T_2 for an operating qubit at ultra-cold temperature is 10 minutes and this record is held by a Chinese research group.[13] If in theory, qubits could operate at room temperature, this process would likely require very high pressure, which presents its own logistical challenges. Quantum sensors (e.g., ytterbium complexes) face a different challenge.[14] These systems must retain short decoherence times and remain stable in complex environments, such as liquid or high thermal fluctuation, in order to be useful as a detection tool (i.e., giving a readout with a low signal-to-noise ratio) for chemical analytes or even dark matter.

Overcoming the ultra-cold temperature limitation and achieving chemical stability, alone, will take several years, if not decades, for researchers across the globe to accomplish. According to a recent RAND report, the United States is in the lead for developing quantum sensors, but lags behind China in quantum computers and quantum communications.[15,16] However, another report claims that the US is ahead of China in quantum computing, but lags behind in sensors.[17] Despite the conflicting findings, both state that each subdomain, regardless of country, remains several years away from possible commercialisation. Only new materials and new chemicals with their unique physical properties will open technological frontiers as current engineering manipulation are constrained by the issues discussed above. State-of-the-art QIST materials that are being explored include: quantum dots, superconductors, nitrogen-vacancy centres, and molecules (e.g., molecular frameworks, 2D arrays, organic-based donor-acceptor radicals).[18] These diverse classes of compounds are typically composed of transition metals, lanthanide (rare-earth elements), actinides, or mixed-metal systems that will require sourcing from different countries, yet there is an unbalanced dependency on China for these materials for all aspiring leaders in QIST.

The US's Dependence on China

As a result of state policies starting in the 1970s, China overtook the United States as the leading producer of critical minerals in the 1980s.[19] Today, China produces 70 percent of the global supply of rare-earth elements.[20] It also processes almost 90 percent of the global supply. China announced export control bans on separation technologies in December 2023.[21] American researchers do not source these elements directly from Chinese companies, typically purchasing the compounds through US chemical companies such as Thermo Scientific, Millipore-Sigma, and Fisher Scientific. However, the US chemical companies still rely on China for the raw resources. The US is playing catch-up: for only the second time in the 74-year history of the Defense Production Act, Congress has

expanded the definition of 'domestic source' for DPA Title III Awards in the FY24 National Defense Authorization Act, allowing companies and projects in the UK and Australia, in addition to the US and Canada, to be considered domestic sources for DPA funds.[22]

In the future, the US quantum industry will likely face a similar critical mineral dilemma currently plaguing the domain of renewable energy transition.[23] This problem also includes serious supply chain and geopolitical risks—resource nationalism, market manipulation, and political instability, among them—and some of the nations that are supplying these elements also have large debts to China, leaving them exposed to China's geoeconomic pressures.[24,25] Unlike the renewable energy sector, which has for the most part achieved technological readiness for large-scale deployment, quantum technologies are still in the basic scientific research stages, possibly prototyping at best.[26,27]

Outside of securing raw elements, the US also relies on Chinese manufacturing companies for critical components needed to build quantum devices because they are still in the nascent stages of development and are usually built in-house, thus requiring niche parts. While US policymakers have made grand advertisements for funding new mining and recycling projects, the reshoring of high-tech minerals and manufacturing companies will take a couple of decades to become "mineral independent" and come at a great cost.[28]

As the new Trump administration prepares to define policies that will shape the US science and technology leadership trajectory in the next four years and beyond, it needs to project a clear and actionable vision to how the country can reach quantum superiority.[29] The US's ability to advance in QIST strongly depends on its ability to have access to Chinese-controlled minerals and resources. Over geopolitical tensions, China has in the past two years furthered its restrictions on critical mineral and metal exports.[30] The move is seen as a signal in anticipation of further US tariffs and trade restrictions.[31]

Against this backdrop and with a need to advance US scientific quantum leadership, directives are needed for the academic community to pursue QIST research while policymakers need to ensure US access to critical components, materials, and talent. Recognising that QIST research and development (R&D) is still nascent, and it is too early to accurately predict which country has the lead in the quantum race, for the former, fundamental research areas need to be identified.

To that end, the US National Academies report outlines priorities to either maintain or retain a competitive quantum edge by focusing on (a) design and synthesis of molecular qubits, (b) measurement and control of quantum systems, and (c) experimental and computational approaches for scaling qubit design and function.[32] For the latter, policymakers need to strike a balance to secure US access to critical components, materials, and talent—including from China—while working with US allies and partners to strengthen sources and supply chains, and also allowing for cooperation with Chinese researchers. For example, recent US export control restrictions on China excluded deemed export provisions, allowing Chinese nationals to conduct scientific work in the United States and US companies with US team members without running afoul of export regulation.

In summary, the escalating export bans between the United States and China against the backdrop of QIST research could derail technological progress in the domain. China has already retaliated with bans on key raw materials needed for semiconductors, renewable energy, and QIST itself. The trade war is likely to get worse under the Trump administration, which is bad news for QIST R&D. Despite heated rhetoric and political stances on China, practical solutions and fundamental research are still needed to secure and advance the US technological leadership in QIST. If the United States is honest about the international QIST R&D trajectory, given that it is riddled with technical challenges, policymakers should match their risk-mitigation strategies to the science and engineering realities. The United States government must find ways to negotiate with China on strategic trade without impeding the ability of US researchers and companies to develop quantum technologies. If the US is willing to lose access to essential prototyping elements, and therefore forgo its competitive edge in QIST R&D, how can these actions possibly be justified as enhancing national security?

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The Future of AI is Sovereign: How it Evolves is Up to Us

Trisha Ray

Advanced Artificial Intelligence (AI) is fundamentally strange. We can think of this "strangeness" in terms of the classic iceberg analogy. At the tip of the iceberg, we do not always know why models behave the way they do. While we see the inputs and outputs in black box AI, the internal reasoning of these models is opaque.[1] One level below the surface, AI is strange because of the culture that surrounds it. There is often an air of inevitability when proponents of AI are asked whether AI development needs to decelerate—a narrative now buttressed by geopolitical rationales: If "we" don't create this powerful Artificial General Intelligence (AGI), "someone else" will.[2] Finally, at the base of the iceberg, is the fact that broad proclamations about the benefits to humanity from AI ignore one crucial fact: AI infrastructure at the scales that we would need to build and deploy models at scale necessitates capital, infrastructure, manpower at a level that only highly centralised entities—tech giants, or well-resourced governments—can marshal.

Enter: sovereign AI, an idea defined as "a nation's capabilities to produce artificial intelligence using its own infrastructure, data, workforce and business networks."[3] At a time when more governments are embracing sovereign AI, this essay examines the varied models of sovereign AI that may emerge based on the type of governance and government, industry role, and institutional capacity.

Models for Sovereign AI Futures

AI, particularly General Purpose AI, requires massive investments in data collection, compute (mainly GPUs), related energy infrastructure, and workflow management.[4] As things stand, only highly centralised and well-resourced entities, i.e., Big Tech companies or big governments, would be able to build such models at scale, at least based on the realities of technology as they exist. Sovereign AI is not a passing trend, but a recognition that relying on the goodwill of a handful of powerful AI companies, chipmakers, and cloud service providers, among others, is contrary to national interest. All the "weirdness" of AI—bias, hallucination, lack of guardrails, lack of accountability, the concentration of capital—have resulted in governments turning to sovereign AI.[5] A few key factors would then affect the trajectory of Sovereign AI in a given country: the relationship between AI industry and government, strength of regulation, and institutional capacity within governments. Based on these factors, this article proposes four scenarios: AI Technostates, Hybrid Systems, Neo-Feudal Systems, and Neo-colonies.

AI Technostates

Well-resourced states, with abundant capital, alignment with industry, and ample institutional regulatory capability may emerge as AI Technostates.[a]

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[a] Note: capability need not equate to hands-on regulation.

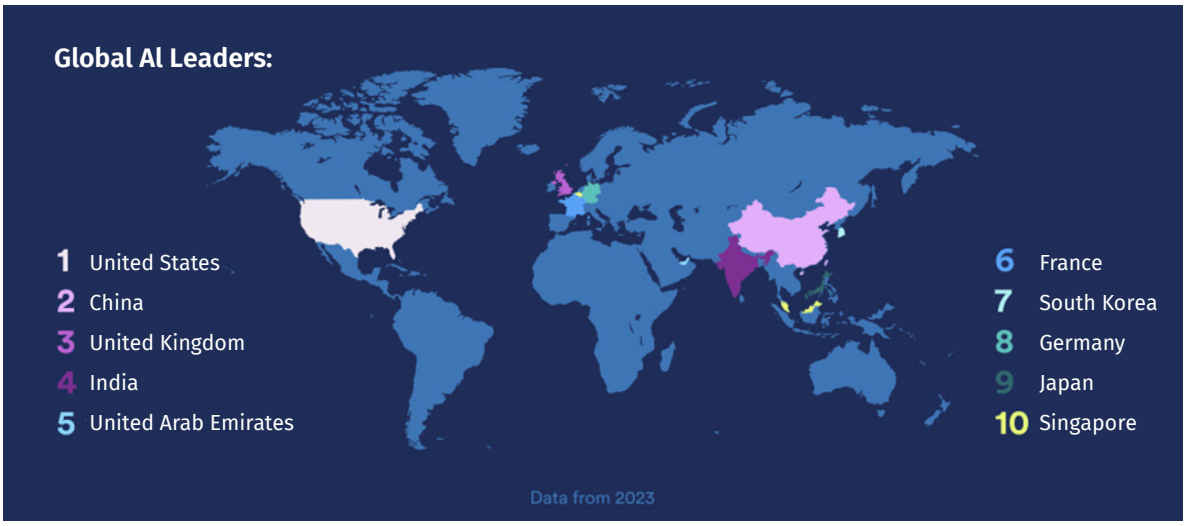
Both the United States (US) and China are home to some of the most prolific institutions in terms of AI publications, including the Chinese Academy of Science, Tsinghua University and Zhejiang University in China, and the Massachusetts Institute of Technology and Stanford University in the US.[6] In the same vein, the US leads the world on the number of notable AI models, and China on the number of AI patents.

The US government has sought to entrench the country's AI leadership by restricting access to key technologies and fostering AI use cases to supercharge its government and agencies. In the first bracket is a series of chip controls, the latest of which has divided the world into three groups for AI chips sales, ranging from least to most restricted.[7] In the second bracket, the Biden Administration's Executive Order on Trustworthy AI (now rescinded) had sought to harmonise the government's approach to AI.[8] Among the earliest of Trump's presidential actions upon assuming his second term is the creation of the Department of Government Efficiency (DOGE), a temporary, quasi-governmental agency tasked with modernising US government software, network infrastructure, and IT systems.[9]

The 2024 Federal Agency AI Use Case inventory documents 1,757 AI use cases, varying from the Office of Personnel Management using AI to improve job recommendations on the USAJOBS portal to the Department of Homeland Security's procurement of an AI tool for social media surveillance to supplement traveler screening.[10] The US's AI infrastructure projects have seen investment both from the US private sector, which saw the announcement in January of the Stargate Project, a US$500-billion AI infrastructure project, and the US government, through Executive Order 14141 on allotting federal land for data centres (one of the few Biden EOs the new administration has not yet revoked).[11]

China is ahead of the curve in the developing world. As of early February 2025, the only three non-US LLMs in the top 10 on Chatbot Arena's leaderboard are Chinese: two built by DeepSeek, and the other by StepFun.[12] China benefited from the presence of US tech powerhouses, and the return of high-tech talent from the US following a crackdown on Chinese nationals on concerns of economic espionage.[13] The growth in the country's homegrown models was forced along in part due to US chip export controls. Finally, the Chinese Communist Party at both the national and city government level has sponsored research and provided subsidies to spur AI development and have supported growth in firms in which the private sector would otherwise not have invested.[14] China is an example of a big state that has deployed both heavy-handed regulation and its vast institutions to build sovereign AI.

Figure 1: Global Leaders in AI



Source: Stanford Global AI Vibrancy Tool.[15] ** International borders as they appear in the original.*

Both the US and China have potential to become AI Technostates, but while the US government's vast institutional capacity is being deployed to supercharge the government's own processes, the Chinese government is leading AI development in the country, injecting investment at scales the private sector is not. Beijing also released some of the world's earliest and most comprehensive guidelines and regulations for AI services. Both governments are large: the US Federal government employs 2 million civilians, and the Chinese government has 8 million civil servants.[16] However, while the US government's effectiveness and regulatory quality, based on World Bank indicators, are high, this does not translate into *comprehensive* controls.[17] It is worth noting then that this model of Sovereign AI could take diametrically opposite forms, given AI can be used equally to enhance choice and limit freedoms, becoming either a police state or, as one economist describes it, a "high-tech open society with an AI-fortified e-government."[18]

Hybrid Systems

Hybrid systems will involve the co-development of AI infrastructure and use cases. On one level, we would see governments partnering with corporations, some homegrown, others foreign, to build their AI infrastructure and models. Hybrid systems may also see government-led AI development and applications in some critical sectors, but not all. Another shape such a system could take would be the Digital Public Infrastructure (DPI) model, with open-source datasets and models, widely available compute infrastructure, and AI Platform as a Service (AIPaaS).[b,19]

[b] The Digital Public Goods Alliance's discussion paper on AI is useful in this context and is included in the endnotes.

Many countries pursuing sovereign AI would fall into this category. An example is the Government of India's approach, which includes homegrown open-source models like Bhashni, open government datasets, and compute capacity, as well as partnerships with companies like Microsoft.[20] Layered on top of the government's efforts are B2B partnerships, such as the ones inked between NVIDIA and a number of Indian conglomerates.[21]

Many members of the European Union (EU), should the bloc's combined package of the Digital Markets Act and the EU AI Act succeed, would likely arc toward a Hybrid System or an AI Technostate model. The EU's approach benefits from the fact that its collective regulatory heft and institutional capacity allow it to change markets and mobilise investments in ways the individual members would not be able, even as it does not have homegrown AI powerhouses at numbers or scales comparable to those of the US or China. Singapore is similarly hybrid, involving deep partnerships between Singaporean research institutions and government agencies, as well as international companies. Singapore National AI Strategy 2.0 outlines as its goal: "Singapore aspires to be a pace-setter—a global leader in choice AI areas, that are economically impactful and serve the Public Good."[22] The Singaporean government has also rolled out shared resources and services like AI Verify, a testing toolkit that companies can use to test their own AI systems.

Neo-Feudal Systems

Neo-Feudalism is a new form of feudalism where "entire realms of public law, public property, due process, and citizen rights revert to unaccountable control by private business."[23]

Weak government and weak governance, combined with strong influence of large AI companies built around closed models could result in a form of AI neo-feudalism. Neo-feudal systems abound in science fiction: in the 1982 classic film, *Blade Runner,* there is no government, and the city, perhaps the world, is run by the Tyrell Corporation. The AGI research and core models of most companies currently working such models—OpenAI, Google DeepMind, Anthropic—are closed-source. Some, like OpenAI's Sam Altman, state that closed-source is more secure, especially for technology as dangerous as AGI.[c,24] However, the US Cyber and Infrastructure Security Agency (CISA) has argued that the benefits of open-source AI far outweigh the risks.[25] The closed- vs. open-source debate has not been settled, and proprietary models are the current standard.

As the race toward AGI accelerates, AI oligopolies will become the norm, as the level of investment, data and sheer compute required to make a breakthrough pushes smaller firms to merge with larger ones, unchecked by anti-trust regulations. A neo-feudal system may take the form of governments ceding services and functions to private sector entities. We may also see the creation of new virtual "company towns", communities centred entirely around providers of AI services. This is still sovereign AI, but with the traditional sovereign subsumed or merged with new corporate sovereigns.

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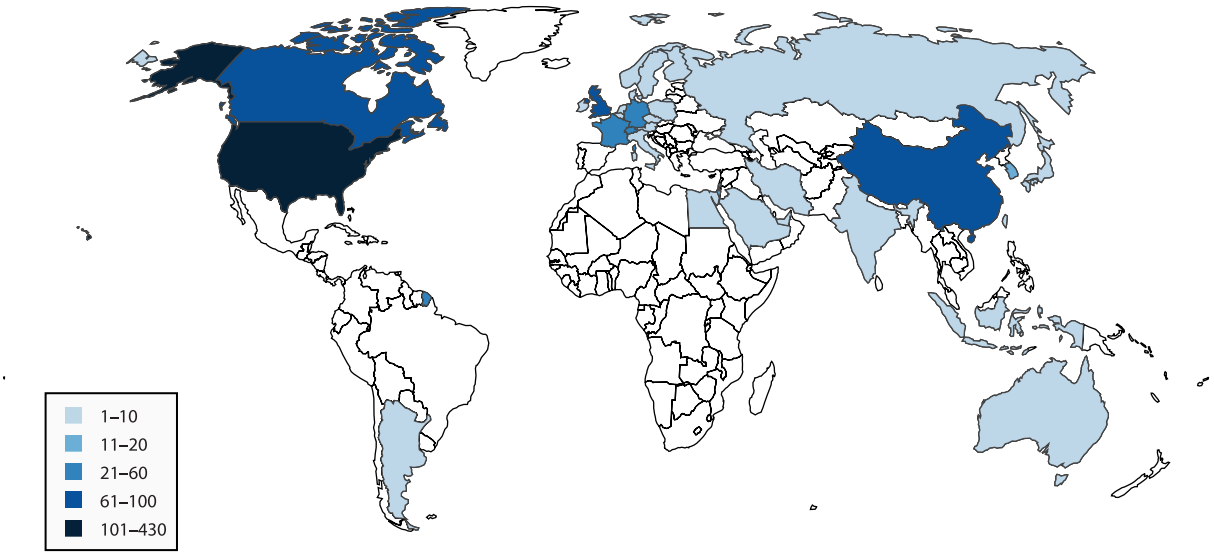
[c] Meta is a notable exception, but not the standard.

Neo-colonies

Governments with low institutional capacity and weak or non-existent regulations, paired with negligible industry investment—homegrown or foreign—within their countries, will become consumers of models developed beyond their shores. Such "neo-colonies" will fall into the sphere of influence of one of the other three systems, as consumers and buyers, suppliers of data and other AI inputs. In view of the current geographic concentration of AI investment, research and development, paired with low government AI readiness in some regions, many countries risk falling into the neo-colonial model.[26]

Figure 2: Concentration of Notable Machine Learning Models, by Country

Number of notable machine learning models by geographic area, 2003–23 (sum)



Source: Stanford AI Index Report.[27] ** International borders as they appear in the original.*

There exist nascent efforts that would support sovereign AI in such geographies, like the African Union's Continental AI Strategy which includes harmonised regulations and cooperative capacity building as its pillars, pooling resources and forming a de facto regulatory bloc.[28] Sustaining and growing efforts would be foundational to avoiding the replication of colonial patterns in a new technological era.

Conclusion: The Future as a Policy Driver

The scenarios presented in this article can only paint an incomplete picture, as the real world is a whirlpool of factors that will influence the trajectories of sovereign AI. Energy constraints will be a crucial variable, for instance, whether there are breakthroughs like

cost-effective nuclear fusion or if competing demands for energy infrastructure will foment social unrest. Trust is another element: Will societies continue to trust their governments, and view them as legitimate arbiters of their interests?

In a wide sweep of rationales different entities have outlined, each requiring varying l evels of control and territoriality, analysts often hyperfocus on the legitimacy of sovereign AI projects. But sovereign AI is one of the most important trends of this decade, and the intent of laying out the four scenarios in this essay was to urge observers to assess Sovereign AI projects not just through the lens of modes or tools, but concrete outcomes.

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Condemned to Be Free: Balancing Free Speech and Security Online

Anulekha Nandi and Anirban Sarma

In 2019, the United Kingdom's (UK) Digital, Culture, Media and Sport Committee released its final report[1] in a longer enquiry into disinformation and 'fake news', training its focus on the Facebook and Cambridge Analytica scandal. The report foregrounded the growing concerns about the opaque business models that shape the algorithmic curation of targeted political advertising and disinformation campaigns, often by foreign countries. The 18-month enquiry highlighted how the dominant market position enjoyed by these companies enables them to pursue business models that subvert local laws and user protections. At the same time, the combination of economics and algorithms that enables surreptitious targeting also creates echo chambers and filter bubbles in online spaces that prime vulnerable individuals for radicalisation, or allow the escalation of dangerous speech[a] into offline violence that results in threats to human life and national security.[2]

To be sure, before social media platforms showed their colours as enablers of harm, much of the world heralded rapid digitalisation, the evolution of information and communications technologies, and the emergence of social media as "epochal" transformations. They were seen as a manifestation of the 'public sphere' ideal: spaces where debate, dialogue, deliberation and democracy would flourish. Today, social media still remains effective channels for democratised access to civic and political participation.

Therein lies the perpetual dilemma in the governance of social media platforms.

In contrast to politically centralised countries like China,[3] democratic states tend to ensure freedom of speech and expression as a fundamental human right for its citizens, albeit with reasonable restrictions. These restrictions apply even in the United States (US), for instance,[4] a country with perhaps the strongest protections for free speech as well as under international law in the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights.[5] "Reasonable restrictions" typically encompass unlawful and harmful activities, incitement to violence, threats to sovereignty and national security, and disruptions of public order.[6]

In 2016, social media platforms were instrumentalised in enabling foreign interference in the US election.[b,7] In the years prior, however, these platforms were already being implicated in harmful activities, including information manipulation in war zones, manipulation of public sentiment by organised group of actors, dissemination of child sexual abuse content, harassment of marginalised communities, radicalisation, dissemination of terrorist content, and inciting offline violence.[8] Consequently, over the years, a spectrum of safety and security risks—to individuals and states—have led to reasonable restrictions becoming the norm.

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a The term 'dangerous speech', as distinct from hate speech, was coined by American journalist, Susan Benesch, as forms of expression that increase the risk of people condoning or participating in offline violence. See: https://www.dangerousspeech.org/dangerous-speech

b According to a declassified document released by the Unites States' Office of the Director of National Intelligence, Russia used a multi-faceted influence campaign on social media combining covert intelligence operations with overt efforts by Russia-backed state and non-state actors. (See: https://www.dni.gov/files/documents/ICA_2017_01.pdf). This also included attempts to infiltrate voting infrastructure and influence public opinion and promote discord through social media (See: https://daviscenter.fas.harvard.edu/insights/why-do-we-talk-so-much-about-foreign-interference)

The task of minimising the safety and security risks of social media is not easy. After all, these companies' architecture of technology and business converge on the data and attention economy.[9] Social media companies have significant control over both, the millions of consumers whose attention they seek to sell to advertising companies, as well as the publishing side of the market. This is reinforced by sophisticated advertising infrastructures designed to uniquely target consumers armed with staggering wealth and minutiae of information about both these sides of the market in their position as an intermediary.[10] Social media companies are entrenched in opaque marketing techniques subtended by data infrastructures and insights generated from granular behavioural data from connected media like apps and plugins.[11]

Indeed, the issues with regulating Big Tech are the same as those that emerged in corporate governance with the spread of globalisation and transnational firms.[12] Given their market dominance and globally sprawling operations, ensuring compliance with rights standards and regulations is fraught with challenges. This is because rights protections and enforceability tend to fall under the purview of not one, but various jurisdictions; it is a challenge to regulate firm behaviour across such jurisdictions embedded as they are in the political and legal circumstances of the country of their origin.[13]

Reasonable Restrictions as the Norm

Online platforms have become so deeply intertwined in citizens' civic and political participation that it could be said that our collective lives are being curated and defined by algorithms. If, at its nascent stage, social media was trumpeted as the ideal public square, it later revealed its dark underside: as potent tools of bullying and harassment, amplification of misinformation, disruption of public order, and foreign interference; and then, as an instrument for harmful behaviour, stoking internal instability and disharmony and grey-zone warfare. Thus, over time, the reasonable limitations to free expression became the norm for governing and regulating this space. Safety and security assumed primacy, at least in theory, to enable civic and political participation; sometimes, however, inadvertently, and at other times, wilfully, squelching such modes of democratic engagement.

Security threats that impinge on freedom of expression can broadly be categorised into three dimensions: These include threats to *personal safety and internal security, and the threat of foreign interference*. A 2020 research found that in the United Kingdom (UK), 62 percent of adults and an alarming 81 percent of 12–15-year-olds have had at least one harmful experience on social media in the 12 months prior.[14] Personal safety can be compromised through bullying, sexual grooming, harassment, and identity-driven attacks based on gender or religion. The harms also encompass incitement to suicide, hate speech and algorithmic discrimination, sexual extortion, invasion of privacy, frauds and scams, misinformation and disinformation, phishing and catfishing, cyberstalking, and smear campaigns.[15] Online misinformation and extremist campaigns have the potential to translate into offline violence shaping mass behaviour.[16]

Whichever way harmful content is created, their dissemination and consumption is notoriously difficult to trace, intertwined as they are with opaque algorithmic architectures and the logic of business practices predicated on an attention economy. Algorithms trained on extensive and granular personal and behavioural data often lead to the bypassing of rational reflection.[17] The mode of recommending content based on consumption patterns often resembles predatory advertising practices. These targeted content recommendations are important for user retention and network effects to ensure the exploitation of economic value that users represent. These characteristics have been weaponised to disrupt public order in the form of dangerous speech and translation to offline violence as well as foreign manipulation and interference through large-scale misinformation campaigns.

At the heart of dangerous speech escalation and foreign interference lies the algorithm's ability to influence user behaviour. Exploiting, entrenching, and amplifying cognitive biases lead to mass behaviour change operations.[18] Compounding the challenge is not just accountability of platforms but the difficulty to trace origination. Content policy and regulatory development have often deliberated on the limits of safe harbour under intermediary liabilities. However, transferring blanket censorship powers to platforms would lead them to err on the side of caution so as to not run afoul of the authorities.[19]

This highlights the difficulty of establishing effective regulations—legal, political, and economic relationships get implicated within the balance of power between companies, users, and governments.[20] Mandating automated censorship would mean transferring censorship rights to a private entity; and state regulation would be cumbersome and potentially overreaching, creating a China-like situation of state control.[21] The imperative is to develop a multi-pronged strategy to navigate the competing concerns that arise in this domain.

Content Policies: A Double-Edged Sword

Broadly, national regulatory approaches to online speech may be thought to lie along a sliding scale: the liberal US approach with 'reasonable restrictions' is at one extreme, while China's 'censor-and-expunge' approach is at the other; most other countries lie somewhere in between. Beyond these frameworks, the closest thing to online law are the content policies and community guidelines of social media platforms themselves, which set down rules of conduct that their moderators seek to enforce.

Platforms do try to promote respectful and civil interaction by establishing rules against harmful speech and toxic behaviour, and by reserving the right to take down offending content. In effect, however, content guidelines and moderators often end up stifling speech on platforms and exercising an omniscient power over personal expression. Besides, the unilateral decisions sometimes taken by Big Tech firms to deplatform or suppress content and users—which could be at odds with national laws supporting free speech, to begin with—can be deeply problematic.

In 2016, for instance, Facebook was roundly criticised for censoring a post bearing the image of the Pulitzer Prize-winning 'napalm girl' photo from the Vietnam war, which shows

nine-year-old Kim Phuc, crying and running naked down the road during a napalm attack. Following widespread fury, the company reinstated the image, explaining that a picture of a naked child would normally violate its community standards, but that in this case, it understood that the "value of permitting sharing [the photo] outweighs the value of protecting the community by removal."[22] Some years later, Twitter found itself in the eye of a storm in 2022 after internal documents revealed that the company had suppressed media articles about then US President Joe Biden's son Hunter's business activities in Ukraine before the 2020 US elections. The exposé also revealed a variety of content restrictions and blacklisting techniques Twitter was using to censor posts on its platform.[23]

Algorithms are routinely pressed into the service of content policies, compounding their double-edged effect. Facebook, Twitter, and YouTube all use algorithms to moderate content, and these codes determine which expression is either permissible, to be amplified, or muzzled. On average, 3.7 million new videos are uploaded to YouTube every day,[24] but the algorithms used to assess them are opaque. YouTube claims that its AI applications allow it to identify and remove 80 percent of offending videos before they are routed to a human moderator.[25] However, content creators are often left bewildered about the reasons for removal, and are frustrated by the lack of transparency surrounding YouTube's process for appealing against takedowns. Moreover, takedowns result in 'strikes' against a creator's channel, leading to temporary upload restrictions; enough strikes could eventually get a channel permanently disabled.[26]

The issue of content moderation has proven surprisingly difficult to manage. Without a doubt, the political and cultural biases of social media platforms and their pursuit of advertising revenue shape their treatment of different kinds of content. However, the fallibility of underpaid and overworked human content moderators,[27] and far-from-foolproof AI tools also play a role. As online hate speech against Myanmar's Rohingya Muslims escalated in the two years leading up to the 2017 genocide against the community, it was discovered that Facebook employed only two Burmese-speaking moderators in that period.[28] Additionally, platforms' growing reliance on AI to detect harmful content is flawed as AI is often poorly adapted to local languages.

Towards Safe and Secure Online Public Spaces

Given that most forms of harmful expression, including hate speech, proliferate primarily on social media, the responsibility for curbing them ought to be assumed in large part by social media platforms. Across geographies, however, it is widely agreed that platforms are doing little in this regard.

There is enough evidence to suggest, for example, that hate speech has increased on Twitter globally since its acquisition by Elon Musk.[29,30] Facebook has a long history of applying its content policies inconsistently, or in markedly self-serving ways. In Australia, for example, Big Tech platforms have tended to be callously negligent of the volumes of child sexual abuse material (CSAM) in circulation, and also of the thousands of links to CSAM sites being distributed via social media's direct messaging services.[31]

When allegations of harmful speech are raised, platforms often defend themselves by arguing that they are mere *intermediaries* between content creators and consumers, and not *publishers* themselves, and therefore cannot be held accountable for posts. This may be tenable up to a point. Tech laws in several countries, such as India's Information Technology (IT) Act, include a 'safe harbour' clause that says "an intermediary shall not be liable for any third-party information, data, or communication link made available or hosted by it."[32] There is a caveat though: the safe harbour will not be granted if an intermediary "fails to expeditiously remove" a piece of content even after the government flags that it is being used for unlawful purposes.[33]

A critical mechanism for enforcing accountability from social media platforms is provided by the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules of 2021 that were formulated under the aegis of the IT Act. The Rules identify eleven types of content that intermediaries cannot publish or transmit. These include information that is "obscene, pornographic, paedophilic, invasive of another's privacy", threatens national security, or is "patently false and untrue or misleading in nature."[34] Not only do the Rules make it mandatory for intermediaries to take down offensive content of this kind when alerted, but they insist that intermediaries must use technology to pre-screen it and remove it pre-emptively. The message is clear—intermediaries can no longer profess ignorance or indifference about what they host. As several cases in Indian courts have demonstrated since, the judiciary has thrown its weight behind the Rules, and Big Tech is feeling some heat.[35]

Other countries too, are finding ways to push back against the transgressions of social media and are advancing online safety. Australia, for instance, is systematically enforcing more ethical and responsible behaviour from online service providers (OSPs).[36] A focus of the country's Online Safety Act, in effect since June 2021, is to make Big Tech and other OSPs more accountable for safety by laying down a set of 'Basic Online Safety Expectations' that compel service providers to tackle CSAM and other virtual harms more actively. The Act makes it compulsory for tech players to develop codes to detect and remove CSAM, failing which eSafety—Australia's regulatory body for online safety—can impose industry-wide standards for the purpose.[37] With eSafety prioritising the investigation of complaints about CSAM, OSPs with Australian end users are under pressure to align their safety procedures with the Act's requirements.

The Indian and Australian initiatives are useful models, and similar approaches are being implemented in other parts of the world. Yet, balancing free speech and expression with security and safety is also about weighing competing interests, which is problematic. France's experience with the Avia Law illustrates the dilemma. In 2019, a French parliamentarian introduced a bill—popularly called the Avia Law—to regulate hate speech on social media. It called for platforms to remove hate speech within twenty-four hours of a notice or complaint being received.[38] Opposed furiously by free speech activists, the bill was watered down, and the French Constitutional Court eventually struck down the core provision about content removal within twenty-four hours, calling it "a breach of the right to freedom of expression and opinion."[39] The final version of the Avia Law that entered into force in 2020 was a mere shadow of the law it could have been.

The Road Ahead

In 2023, UN Secretary-General António Guterres warned, "The spread of hatred and lies online is causing grave harm to our world. Misinformation, disinformation and hate speech are fuelling prejudice and violence; exacerbating divisions and conflicts; demonizing minorities; and compromising the integrity of elections."[40] The urgency of finding an optimal balance between free speech and safety and security, therefore, is growing exponentially. As countries explore a variety of possible solutions—from stringent laws to heightened self-regulation by tech companies—the following measures could prove useful.

- **Broadening the scope of intermediary liability:** The scope of "intermediary liability" needs to be broadened, and social media platforms and other intermediaries ought to be held squarely accountable for the content they host. The human and technological resources deployed by these platforms should work towards removing harmful content more proactively.

- **Building a stronger culture of fact-checking and information verification:** A robust culture of fact-checking, verification, and validation must be instilled across national digital media ecosystems. Instituting related capacity-building programmes, codes of conduct, and standard operating procedures at digital media outlets could be valuable.

- **Identifying governance levers:** Governance mechanisms span voluntary non-binding initiatives, community guidelines, and laws and regulations such as those on intermediary liabilities. There is a need to identify and align appropriate governance levers with relevant stakeholders and institutional mechanisms to develop effective policy and regulatory pathways.

- **Promoting pathways for citizen participation:** The development of platform governance strategies needs to promote and include active citizen participation to ensure that such measures are working in favour of the public. In addition to the participatory process, this requires legitimation processes to ensure that these initiatives are codified within operational and regulatory practices.

- **Developing definitional consensus and standards on online risks:** A critical bottleneck impeding effective governance is the lack of definitional standards and consensus on risks online. This highlights the need to develop common frameworks of reference for effective regulation of transnational social media companies.

- **Strengthening AI-driven detection systems for harmful content:** In the longer term, every effort must be made to advance AI-based applications for detecting harmful content in local languages. This is a large-scale, multi-stakeholder undertaking, and will involve building a sprawling corpus of local-language content and training data. If done right, though, it could pay rich dividends in the future.

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The Instrumentalisation of Gendered Narratives in the Search for Legitimacy of Terror Groups

Naureen Chowdhury Fink

Terrorist groups are often characterised by predominantly masculine narratives; think 'terrorist' and what often comes to mind, and is reflected in popular portrayals, is the angry young man, in military-type clothing, and with combat-related lexicon reflected in the imagery. However, the emergence of ISIS (Islamic State in Iraq and Syria) in the early 2000s, and its emphasis on a state-building enterprise, brought with it an increased focus on women and girls as a means of legitimising their narrative and facilitating the group's purported political project of building a theocratic state. The outflow of supporters from across the globe to join ISIS resulted in the arrival of approximately 20,000 "foreign terrorist fighters" and their families—a conservative estimate[a]—in the period around 2013-2017;[b] UN estimates suggest that approximately 13 percent of those who travelled during that period were women, with some variations across different regions.[1]

ISIS no longer has control of the territory it deemed "the Caliphate"[c] and today exists as disparate groups or affiliates conducting terrorist attacks. The trends analysed in this essay highlight the instrumentalisation of gendered narratives and voices by terrorist and violent extremist groups to acquire legitimacy.

In contrast to the relative absence of women in the global narrative of the Al-Qaeda core, and building on the initiative of Al-Qaeda in the Arabian Peninsula which briefly produced *al-Shamikah,* an online magazine for women, ISIS emphasised the importance of women in building a true community for the faithful. They not only encouraged the presence of women and children in its territories, but developed a strong propaganda campaign appearing to highlight women's voices, and thereby attempting to legitimise their narrative of building a community and not just a terrorist group.[2]

Facilitated by the growth of social media platforms in the 2000s, women increasingly spoke for ISIS in their own voice—or at least claimed to do so—to complement and amplify the official messaging from the group welcoming the faithful from around the world to a new community with all the formal trappings of a state. Around the years 2014 to 2017, social media posts, statements, articles, and videos emerged, with riveting stories of travel, romantic endorsements of life in the "Caliphate", and appeals for more to join them.

One story clearly remembered by analysts is that of Aqsa Mahmoud, a young woman from an affluent Scottish neighbourhood who left her family in 2015 to join ISIS and thereafter motivated other young, and even much younger women to follow. Aqsa not only made the journey herself but took to social media to glorify life in ISIS-controlled territory.[3] Her motivations appeared grounded in both religious rhetoric, on one hand, and base

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a These are approximations as many also traveled before the declaration of the Caliphate, to oppose Assad, but then later associated with ISIS. "Joining" ISIS was not a clearly defined term since many "joined" in non-combat roles to support the cause.

b Another, similarly conservative estimate is closer to 41,000, with approximately 12% of those being women, and 13% were minors.
See: https://icsr.info/wp-content/uploads/2018/07/ICSR-Report-From-Daesh-to-%E2%80%98Diaspora%E2%80%99-Tracing-the-Women-and-Minors-of-Islamic-State.pdf.

c An Iraqi-led coalition liberated Mosul in 2017.

materialism, on the other—as she flaunted the homes and goods seized from local citizens and handed as rewards to those making the journey. In an entry on her Tumblr blog, parts of which betrayed her very young age, she gushed about how ISIS loyalists would receive "a house with free electricity and water provided to you due to the Khilafah (the caliphate or state) and no rent included… Sounds great right?"[4]

Mahmoud categorically challenged the prevailing stereotype that all women joining ISIS were from poor and uneducated backgrounds; and as such, lent a veneer of legitimacy and immediacy to the narrative. As security studies professor Mia Bloom noted at that time, "Women already living amid ISIS fighters used social media adeptly to portray Syria as a utopia and to attract foreign women to join their sisterhood in the caliphate. The idea of living in the caliphate is a very positive and powerful one that these women hold dear to their heart."[5]

Gendered Roles in Extremist Narratives

The vilification of the West—by women who have lived in the West—played an important role in legitimising narratives of the so-called Caliphate as a sanctuary and a reprieve from the ills of living among "unbelievers." A Finnish convert, Umm Khalid al-Finlandiyya, once stated that, "As Muslims we need to disavow the disbelievers and live under the caliphate… it's not even allowed nor is it good for you to reside in the lands of the disbelievers."[6] In 2014, British twins Zahra and Salma Halane publicly honoured the anniversary of the September 11 attacks in the US through social media posts; they celebrated violence against the West, including the attacks on Charlie Hebdo's office in Paris in 2015.[d,7]

Even the system of slavery instituted by ISIS and the sexual and gender-based violence that was perpetrated by the group was legitimised through the public endorsement of women to reinforce the legal and historical arguments put forward by ISIS. Writing for ISIS' English-language magazine, *Dabiq*, Umm Sumayyah al-Muhajirah sought to legitimise the practice of enslaving non-Muslim women and warned her peers against mocking or denying the legitimacy of the practice.[8]

ISIS exploited gender stereotypes and leveraged the purported testimonies of women to validate their state-building enterprise. The group—and the women offering them public endorsements—made clear that women's roles were to be centred around the home and family, and were unequivocal about the strict interpretations of religion and custom that would shape the parameters of women's lives. This helped legitimise their appeal to supporters to leave their homes, families, and jobs behind and travel to the "caliphate" by reinforcing their adherence to traditional gendered norms. The proliferation of fast-communication tools offered by emerging technologies and social media platforms meant that women could now speak publicly from their own private spheres.

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[d] On 7 January 2015, terrorist shooting targeted the Paris offices of the satirical weekly, Charlie Hebdo; 12 people died in the attack that al-Qaeda claimed.

Gendered narratives were not, however, only targeted at women; men and boys were also the mark of narratives centred on traditionally masculine roles of fighting for and taking care of their communities. Groups like ISIS used notions of shame and narratives of emasculation to incentivise men and boys to join the cause; they were taunted by narratives that challenged their sense of self or abilities to meet the cultural expectations of men in certain contexts.[9] Imagery glorifying battle and narratives leveraging women's interests in perpetrating violence were intended to persuade young men to get involved. The availability of 'sex slaves' was also highlighted as an incentive. Toxic notions of masculinity and the gamification of violence,[10] where recruitment propaganda was often styled after popular video games, using their catchphrases and imagery, most often resonated with young men.[11]

The Nazi Ideal, the Fighter, the 'Tradwife'

ISIS is not the only terrorist group to have drawn on gendered imagery and deliberately engaged women to help legitimise its narratives. The Liberation Tigers of Tamil Eelam in Sri Lanka, up until their military defeat in the hands of the government in 2009, famously trained female suicide bombers.[e] In this author's discussions with practitioners leading rehabilitation and reintegration programmes, these experts noted that recruitment efforts targeting women particularly emphasised opportunities to escape hierarchical cultural norms and traditions and assume a diverse array of roles, including as fighters.

Beyond offering a legitimising narrative, women presented terrorist groups with opportunities to evade security measures or law enforcement scrutiny as gender stereotypes often meant that security checks were less stringent on women and girls. This author's discussions with law enforcement and border security officials underscored that women and girls often received far less attention even in sensitive locations like airports or checkpoints. Gendered stereotypes have also often led analysts and practitioners to downplay women's agency or motivations in joining terrorist groups, painting them as passive or subservient figures subject to the will of male family members in many instances.[f] Similarly, many states focused on the repatriation or rehabilitation of women associated with ISIS have been slow to hold them accountable for crimes they may have committed in the conflict zones. Public opinion has also sometimes opposed the return of detainees associated with ISIS as the case of Shamima Begum highlighted.[g,12]

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e The LTTE was a Tamil organisation founded in 1976 that fought for a separate state of Tamil Eelam in Sri Lanka.

f The OSCE guidelines highlight the importance of recognising the roles of both women and men as agents and perpetrators, as well as victims and survivors with corresponding rights. For more on addressing the challenges posed by "foreign terrorist fighters" within a human rights framework, see: https://www.osce.org/files/f/documents/4/7/393503_2.pdf.

g Shamima Begum is one of three east London schoolgirls who travelled to Syria in 2015 to support the ISIS. She is now 24 and is barred from returning to the UK. Media reports say she remains in a camp controlled by armed guards in northern Syria.

Historically, images of women and families have been used to "soften" the image of authoritarian leaders or hardline groups. In Germany in the 1930s and early 1940s, the Nazis used imagery of families and children to harken back to a supposed 'golden age' defined by clear gender roles and purposes—not very different from that which was idealised by ISIS. Images in official propaganda and government-sanctioned art would show families in farms and homes, reinforcing "family values" and the claimed superiority of the Aryan race. Women were central to the Nazi goal of a pure ethnocentric state—again, not very different from the ISIS notions—and therefore their health and well-being was essential, leading to the establishment of youth and women's groups for that purpose. The Holocaust Museum in the US estimates that 13 million women were active in the Nazi party, serving as nurses, teachers, guards, and auxiliaries in the police and armed forces.[13] Gertrude Schlotz-Klink, leader of the Nazi women's league, said in a 1936 speech: "The National Socialist movement sees the man and the woman as equal bearers of Germany's future...It asks, however, for more than in the past: that each should first completely accomplish the tasks that are appropriate to his or her nature."[14]

Contemporary far-right groups have continued this tradition, drawing on depictions of women, families, and children to legitimise their goals and ideals.[15] In recent years, the "tradwife" movement, which perpetuates traditional gendered roles for men and women, has been associated with far-right groups seeking to establish a White ethnostate. Many of these images include rustic idealised settings, homogenous families and communities (read: White), modest or even old-fashioned clothing, and activities like farming and cooking. Women have also been central to the rhetoric of many groups justifying racialised or ideological narratives centred on the need to "protect" women from "the other." As counterterrorism expert Elizabeth Pearson recently noted, "This gender binary—strong men must be ready to use force to protect weak women, especially from hostile alien men—is the core narrative of patriarchal, nationalist, ultra nationalist and also Nazi groups."[16]

There have also been concerns about the instrumentalisation of health and wellness programmes by far-right groups or those perpetuating conspiracy-theory-based ideologies.[17] Again, the central imagery of women appear to grant credibility to these programmes, drawing on associations of women with roles as caregivers and mothers.

Terrorist and violent extremist groups have utilised gendered portrayals and narratives, and highlighted their appeal to women and families, as a means of signposting their legitimacy as an alternative social community. Moreover, the involvement of women has served to strengthen the notion of a long-lasting, multigenerational community. For example, Red Ice, a digital platform set up in 2002 by known anti-Semitic married couple, Lana Lotkeff and Henrik Palmgren, helped propagate white nationalist and "alt right" content during the years it was active online,[h] including by amplifying female voices.[18]

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[h] Red Ice has since been banned on YouTube and Facebook, but maintains social media presence in other social media platforms like Telegram. At its peak around 2019, its YouTube videos were getting millions of views.

Counterterrorism, Women, and Peace

In recent years, the gendered stereotypes that terrorist and violent extremist groups have exploited to propagate their ideologies and legitimise narratives have informed a long-delayed focus on this issue among counterterrorism practitioners and policymakers.[19] Although international actors, through the United Nations, have adopted numerous resolutions and initiatives to prevent and counter terrorism globally, the close relationship between the counterterrorism agenda, and that of women, peace, and security was not recognised until the adoption of UN Security Council Resolution 2242 in 2015,[20] and subsequently, by states in the General Assembly. Nonetheless, there continues to be resistance to integrating the two agendas, and ensuring that gendered dimensions of terrorism and counterterrorism are adequately considered among policymakers and practitioners, remains a massive challenge. Indeed, funding and resource allocations to projects tackling these issues remain low.

Operationally, these biases appear to have informed the threat assessments and practices among many states and agencies; women have passed unimpeded through borders, evaded accountability for crimes committed in the conflict zones of Syria and Iraq, and been denied support and assistance required for rehabilitation and reintegration in many places. Border and law enforcement officials note how gender-related discussions are largely absent from their trainings and guidelines;[i] few have had opportunities to discuss the different roles women might play, either as adversaries and threats, or as allies and partners, in countering terrorism. Moreover, the limited presence of women in security services and agencies complicates access and opportunities in some communities.

These dynamics are reflected in efforts both online and offline. As adversarial actors seek to exploit a wider range of emerging technologies and social media platforms to propagate terrorist and violent extremist content, so too, do risks and opportunities reflect a shifting online environment. The Global Network on Extremism and Technology, the research arm of the Global Internet Forum to Counter Terrorism, has produced a number of policy briefs for the private sector, practitioners, and policymakers to consider. These highlight the myriad layers in which gender, technology, and counterterrorism intersect, and underline the importance of considering these dimensions when crafting sustainable and effective prevention and response strategies.[21]

States and counterterrorism practitioners must recognise the many and nuanced roles of women, and consider cases where women are forced or manipulated, while also recognising the instances in which women choose to use their voice and lend credibility to the terrorists and violent extremists seeking to exploit them.

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[i] These insights are drawn from this author's discussions with border and law enforcement officials.

The Way Forward

The participation and contributions of women to terrorism and violent extremism, as in war and conflict, are not new. From Ireland to Chechnya, from Sri Lanka to Germany, women have played an important role in heightening the visibility and reach of groups with extremist agendas.

What was new in terms of the approach adopted by ISIS, and increasingly among contemporary far-right groups espousing or enabling violent extremist views, is the prominence given to women's voices and gendered narratives. The proliferation of technological innovations and social media, and the access these create for individuals to create and amplify content, will likely continue to facilitate this trend. Prevention programmes and interventions, including positive intervention measures and individualised support programmes, need to better reflect the nuanced and diverse roles played by women, and deepen understanding of the impacts of gendered narratives on recruitment and mobilisation.

Governments, the private sector, and international organisations, including regional and municipal authorities, should support opportunities for practitioners, policymakers, and industry to develop and share good practices and solutions, and ensure continuous and predictable funding for practitioners in the field. Organisations engaged in initiatives to prevent and counter violent extremism have often voiced concerns about uncertain and ad-hoc support, which has deep and negative impacts on developing risk and needs assessments and providing responsive support. Moreover, programmes should ensure they do not operate on regressive assumptions of gendered roles; the means by which they address risks should be contextually tailored and informed by a close understanding of local and regional dynamics as well as global trends.

Increasing the number of women in the security sector and attenuating "counter-speech" or "counter-narrative" campaigns to address the gendered narratives and messaging from terrorists and violent extremists will remain critical. Experts have noted that the effectiveness of counter-speech rests heavily on the ability to target the right audience with a credible messenger and message; in many cases this is neither the government nor formal institutions, but civil society and community members who can authentically speak to the risks and experiences of those affected by terrorist and extremist violence.

The views in this article belong to the author and do not necessarily represent those of the Global Internet Forum to Counter Terrorism or its Board. All errors and omissions rest with the author.

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Latin America's Tug-Of-War: The Pulls of the U.S.-China Rivalry

Dawisson Belém Lopes

The intensifying rivalry between the United States (US) and China is casting a long shadow on the current geopolitical scenario in Latin America. This article, written from a Brazilian perspective, explores historical contexts while remaining attentive to the evolving dynamics and collateral effects of this power struggle in the region. From this author's view, the situation appears highly consequential for all parties involved.

Commencing this analysis with a bold theoretical assertion about Latin America, one can rightfully claim that the region distinguishes itself as the most "Westernised" portion of the Global South. It exhibits common features with the West in terms of religion, language, legal institutions, market capitalism, and representative democracy. Building upon this premise, various reverberations may manifest.[1]

When one examines surveys conducted among Latin American populations, it is clear that the US continues to wield societal influence. Faced with a binary choice between China and the US, a majority of respondents almost invariably favour the latter. This trend is particularly evident in Brazil, where a significant portion of the population holds a more favourable view of the United States, compared to, say, Canada, Israel, or the United Kingdom.[2,3] Such pro-US sentiment extends into Brazil's governmental agencies and military, echoing broader regional preferences that underscore America's enduring influence across Latin America.[4]

According to a 2022 report, *A World Divided: Russia, China, and the West*, Latin America, where relatively positive feelings toward the US have reached record highs, is an exception within the Global South. On average, the United States enjoys a 24-percentage-point popularity lead over China in the region, with countries such as Venezuela and Nicaragua—whose governments have strained relations with Washington—showing, respectively, a 40 percent and 10 percent preference for the US.[5]

This reflects an enduring phenomenon of cultural hegemony whose consequences permeate everyday life. The United States maintains a cultural edge, a legacy of decades of soft power projection and media influence. For instance, in 2022, 79 percent of internet users in Latin America watched Netflix, followed by 43 percent who watched Prime Video and 41 percent who watched Disney+, indicating high levels of consumption of American media content.[6] English remains the most sought-after second language in schools across the region.[7]

Indeed, walking through the streets of San Jose in Costa Rica, Bogotá in Colombia, or Asunción in Paraguay, one would easily observe unmistakable markers of US influence in food, fashion, and music. There is little evidence of a "Chinese way of life" taking root in the region, even as China's economic presence grows at a fast pace. Brazil, with the widespread presence of American brands like McDonald's, Nike, and Apple, is no exception. Despite the geopolitical competition, the dominance of American symbols remains palpable.[8]

Patterns Change as We Type

Since the early 20th century, the United States has played a major role in Latin America as primary trading partner, surpassing Europe and solidifying its position as the region's most influential external actor. Countries in the continent, except for Cuba, remained under the security umbrella of the US during the Cold War and chose not to join the Non-Aligned Movement in the late 1950s and early '60s. Brazil, albeit consistently adopting a third-worldist foreign policy—especially from an economic perspective—deviated from the Bandung Conference approach by aligning diplomatically with Washington.[9]

This trend shifted in the 21st century when China outpaced the United States as the primary export destination for many commodities from Latin American nations. By 2022, China had become the largest trading partner for countries like Brazil, Chile, and Peru, fuelled by its demand for commodities such as soybeans, copper, and iron ore. For instance, Brazil's exports to China accounted for 32 percent of its total exports in 2021, surpassing the 10 percent of the US by a considerable margin. The foreign policy shift has not only reshaped trade dynamics but has also resulted in broader implications for geopolitical alignments. Countries participating in China's flagship Belt and Road Initiative (BRI), which has seen over US$4 trillion in investments committed globally, have become increasingly tied to Chinese infrastructure and financing projects.[10]

While China has augmented its presence in Latin America through investments and trade bonds over the years, the US's political influence has not had an inexorable retreat. However, the decline in the US share of global GDP—from 40-45 percent in 1945 to a far lower 14 percent in 2023—mirrors Latin America's gradual distancing from White House worldviews.[a] This is evident in voting patterns at the UN General Assembly. In Brazil, during the presidential administrations of Eurico Gaspar Dutra (1946-1951) and Juscelino Kubitschek (1956-1961), the country's representatives aligned with American diplomats at a rate of 90 percent. Nowadays, the convergence percentage between Brazil and the US will not be higher than 25 percent.[11] This general trend applies to the rest of Latin America as well.

There is an additional layer to consider, however. Since the early 1970s, when mainland China replaced Taiwan at the United Nations, Latin America—and Brazil, particularly—have shown increasing alignment with Chinese delegates in votes at the UN General Assembly. This connection has a fundamental rationale: both China and Latin American countries have, for decades, shared similar concerns related to development, finance, peace and security, decolonisation, international law, and other international issues. Such diplomatic like-mindedness cannot be downplayed.[12]

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[a] Such contrasting foreign policy approaches were epitomised by Brazil's foreign ministers, Celso Lafer and Celso Amorim, in the early 21st century. While the former advocated for Brazil to pursue alignment with the Western canon, the latter endorsed some degree of structural revisionism. The global political and economic establishment celebrated President Cardoso as the reinventor of Brazil, attributing to him the successful modernisation of the country's public administration and national finances, preparing it for progress and sustainability. However, Cardoso faced accusations of mimicking Western practices and uncritically incorporating international treaties that unfavourably regulated areas of national concern, such as human rights, the environment, and nuclear non-proliferation. In contrast, President Lula da Silva was perceived as a trailblazer for the Global South, implementing a foreign policy characterised as brave and solidary, challenging the prevailing cynicism of realpolitik. Nevertheless, he was perceived as too ideological in the handling of international relations, potentially jeopardising Brazil's Westernised diplomatic traditions. See: Dawisson Belém Lopes, and Karin Vazquez, "Brazil's position in the Russia-Ukraine war: Balancing principled pragmatism while countering weaponized interdependence," *Contemporary Security Policy*, v. 45, issue 4, 2024, p. 599–611.

Another crucial factor to note, given the increasing polarisation of global affairs, is the assertive position taken by countries like Brazil, Chile, Colombia, and Mexico regarding contemporary international conflicts, such as those in Ukraine and Gaza. It can be argued that the region is no longer issuing a blank cheque to the West or the US, indicating resistance to unilateral influence.[13] Against this backdrop of international security concerns, the waning ability of the United States to co-opt Latin America serves as a cautionary signal.

Moreover, the COVID-19 pandemic highlighted deep-seated inequalities between the Global North and Global South, particularly in vaccine access and distribution. Wealthier nations, including the US, prioritised vaccinating their populations, often leveraging vaccine exports for economic gains, while less affluent countries experienced delays in vaccine access until 2021 or 2022. In response, Russia, India, and China engaged in vaccine diplomacy, extending their efforts to Latin America to expand their influence.[14]

How Disruptive Can Trump 2.0 Be?

As the US and China vie for influence through strategies like friend-shoring, near-shoring, and decoupling,[b] Brazil and Mexico have emerged as net beneficiaries as Joe Biden finished his presidential term. The US has designated Mexico as its preferred trade partner and investment destination, while China directed substantial investments to, and imported commodities from Brazil.[15] Overall, both Brasília and Ciudad de México had reasons to be content with the previous, pre-Trump era.[16]

If Brazil's President Lula resists becoming merely a passive recipient of external influence, the unfolding scenario could serve as a litmus test of his third mandate. During his first days in office in January 2025, Trump promised not to allow the de-dollarisation of the global economy, almost simultaneously announcing the US's withdrawal from the Paris Agreement—actions that foreshadow the hostile posture Brazil will most likely face while hosting the BRICS annual summit and the COP30 conference on climate change in the latter part of 2025. Bilateral trade could also suffer under Trump's second term, particularly due to the tariffs that his administration aims to impose on Brazilian imports.[17] There is also the issue of the massive deportations of Brazilian citizens residing in the US, which have just begun at the time of writing this article.[18]

In Mexico, something new is emerging on the horizon of North American affairs. Claudia Sheinbaum Pardo, inaugurated as Mexican president in October 2024 and the first woman to hold the position in her country, has been pressured to respond to Trump's disrespectful and confrontational remarks regarding the Gulf of Mexico—referred to as the "Gulf of America" by the new US administration—and his rhetoric about stopping Mexican immigrants.[19] Similarly, Panama's President José Raúl Mulino was challenged by Trump's

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b 'Friend-shoring' is encouraging companies to shift manufacturing away from authoritarian states and toward allies. 'Near-shoring' is the practice of relocating business operations to a nearby country. 'Decoupling' means divesting from a country.

promise to make the Panama Canal "American again", citing concerns over a perceived future Chinese takeover, to which Mulino has responded assertively.[20]

Perhaps the most striking example of resistance to Trump's imperial foreign policy has come from one of the US's long-time allies in the region: Colombia. President Gustavo Petro initially refused to accept deportees from the US. After denying authorisation for their landing in Bogotá, he faced threats from Trump, who warned of imposing trade tariffs on Colombian goods. Ultimately, Petro relented and agreed to the return of his country's nationals. However, he still claimed a diplomatic victory over Trump, as the deportees were no longer transported on American military planes but instead by the Colombian Air Force. Additionally, they were allowed to travel without being restrained by handcuffs or chains. The next chapters of this story have yet to unfold, but there is no doubt that Petro demonstrated how a courageous stance—despite limited leverage—could challenge Trump's agenda in the region.[21]

Amidst these developments, accusations of pursuing an anti-US or anti-Western foreign policy, which could be levelled against leaders like Brazil's Lula, Mexico's Sheinbaum, and Colombia's Petro, should be considered from a different perspective. These actions suggest that Latin America is navigating the US-China power struggle with pragmatic ambivalence while striving for an autonomous diplomatic approach. After all, proactiveness and self-assuredness should not be misinterpreted as defiance or non-collaboration.[22]

In a starkly different direction, Buenos Aires now faces the risk of distancing itself from Beijing, as Trump has positioned President Javier Milei as one of his protégés. However, despite Milei's welcoming tone toward the West, Argentina had previously committed to agreements and initiatives suggesting a pro-China stance, such as its membership in the BRI. Further complicating matters, the Argentinian leader has pledged to leave Mercosur—the South American Free Trade Area—should Trump's US sign a bilateral free trade agreement with Argentina.[23]

The transition ahead may not play out as seamlessly, as the ongoing dynamics of the US-China competition will undoubtedly continue to shape the geopolitical future of the region. Time will reveal the full extent of its impact.

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The Arctic Great Game: The Need for Cautious Optimism

Alexander Sergunin and Valery Konyshev

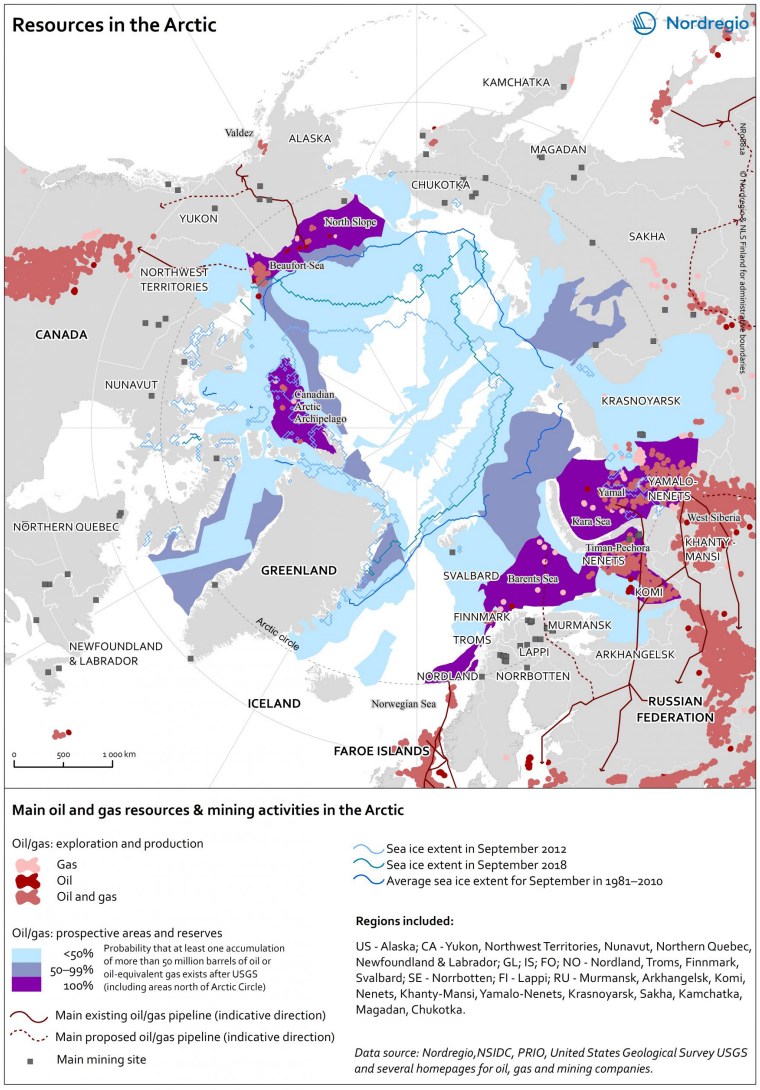
Beginning in the early 2000s, the Arctic was increasingly seen as the region that will underpin the vector of world economic and geopolitical development in the 21st century.[1] Paradoxically, however, until 2007—when Russia resumed maritime and air patrols in the Arctic and North Atlantic and planted its titanium flag at the North Pole at the bottom of the Arctic Ocean—the rest of the Arctic and non-Arctic states paid little attention to this region. During the Cold War, the Arctic was of geostrategic importance mainly in the context of the rivalry between the United States (US) and the erstwhile USSR: in the event of a full-scale war between the two powers, the shortest routes for intercontinental ballistic missiles and strategic bombers would run through the North Pole.

Following the end of the Cold War and the collapse of the USSR, the threat of global nuclear war disappeared, and geopolitical interest in the Arctic declined. Domestically, Russia, suffering systemic economic crises in the 1990s and early 2000s, stopped paying attention to the development of its Arctic territories, whose economic and human potential had significantly decreased.

It was only towards the end of the noughties that the situation began to change. Russia "returned" to the Arctic, both domestically and internationally. At the same time, other Arctic countries began to pay closer attention to their northern territories and the region as a whole. The Arctic has once again, and to a much greater extent than before, returned to the radar of global geoeconomics and geopolitics, and the 'great game' idea appeared in the global political discourse in relation to the region.

In this backdrop, this essay explores a number of interrelated questions: What attracts global attention to the Arctic? Who are the key players in the region? How will this 'great game' likely evolve and what will be its consequences for the world?

Map 1. Natural Resources in the Arctic



Source: Nordegio[2]

The Arctic region holds immense energy resources which, according to many experts, could drive humanity's future (see Map 1). According to estimates, the Arctic is endowed with 90 million barrels of oil, 47.3 trillion cubic meters of gas, and 44 billion barrels of gas condensate;[3] it is also home to nearly 25 percent of hydrocarbon unproven reserves.[4] Over 60 percent of the Arctic oil and gas reserves are in territories that Russia owns.[a] Potential coal reserves in Russia's Arctic region account for nearly half of the country's coal resources—780 billion tonnes, of which 81 billion tonnes are coking coals.[5]

The Arctic region is also rich in non-ferrous and rare-earth metals, minerals, ores, and other raw materials of strategic importance (see Map 1). The Arctic Zone of the Russian Federation (AZRF) boasts the biggest share of these minerals (see Table 1).

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[a] In absolute figures, this equals 375 billion barrels of oil compared to the 261 billion barrels of Saudi Arabia. See: Smith and Giles, Russia and the Arctic, 1. Only an insignificant part of the Arctic reserves has been prospected so far.

Table 1. AZRF Share in Russia's Mineral Reserves

Minerals	Russian Reserves (%)
Apatite concentrate	90
Nickel	85
Cobalt	85
Copper	60
Tungsten	50
Rare-earth elements	95
Platinum group elements	98
Tin	75
Mercury	90
Gold	90
Silver	90
Diamonds	99

Source: Arctic Today[6]

The third source of natural wealth in the Arctic region are the massive biological resources of global importance. The Arctic seas are the habitat of numerous unique marine mammals including the polar bear, polar fox, narwhal, killer and white whales, and the walrus. Over 150 fish species live in the Arctic and sub-Arctic waters, including the important ones for fisheries—the cod, herring, haddock, pollock, and flounder. The Arctic Ocean and Bering Sea fisheries account for nearly 15 percent and 50 percent of the fish catch and sea food production in Russia and the US.[7]

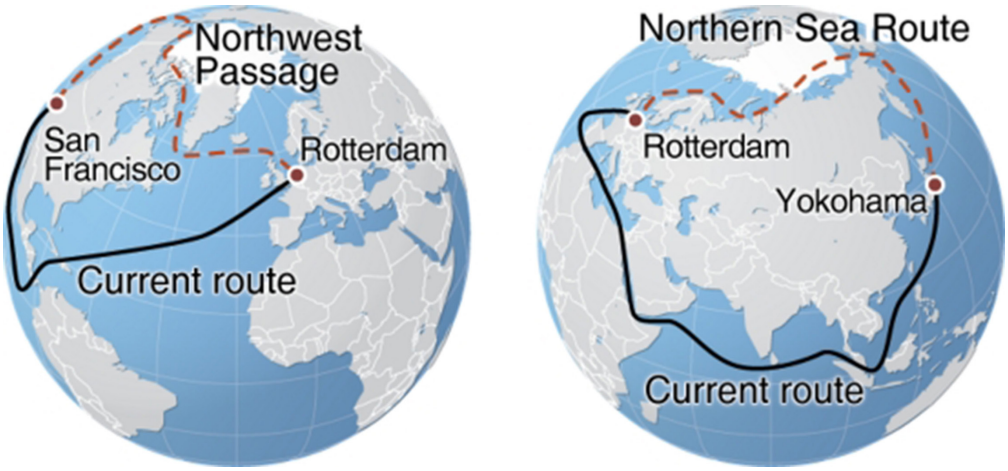
Fourth, the Northern Sea Route (NSR) and the Northwest Passage (NWP) along the northern coasts of Russia and Canada are critical transport routes not only for these two countries but for other states and regions. The passage from East Asia to Europe and North America along these routes is shorter and safer (i.e. piracy-free) than via the Suez Canal (see Map 2).

For example, the route from Yokohama (Japan) to Hamburg (Germany) via the NSR is 11,000 km, while the length of this route through the Suez Canal is 18,350 km. This reduces the journey time from 22 to 15 days, i.e. by about 40 percent.[b] The route between the US northeast coast and East Asia through the NWP is 17-percent shorter than through the

[b] Using the NSR, it is possible to reduce the cost of cargo delivery between Europe and East Asia (China, Japan, South Korea) by 20-40 percent compared to the southern route.

Panama Canal. Although the NSR and NWP cannot compare with their competitors (the Suez and Panama Canals) in terms of traffic volumes, they remain potential alternative routes to southern destinations. In addition, the NSR is the only route for the delivery of LNG (liquefied natural gas) from Russia's Yamal Peninsula to both Asia and Europe.[c]

Map 2. The Northwest Passage and Northern Sea Route



Source: Grid-Arendal[8]

Furthermore, the Arctic region is critical as it has consequences to the global environment in terms of parameters such as climate and sea levels. As the Arctic ice thaws,[9] the natural resources and transport communications are becoming more accessible to stakeholders. The same factor is facilitating the emergence of Arctic tourism, which will likely grow and become increasingly profitable in the foreseeable future.[d]

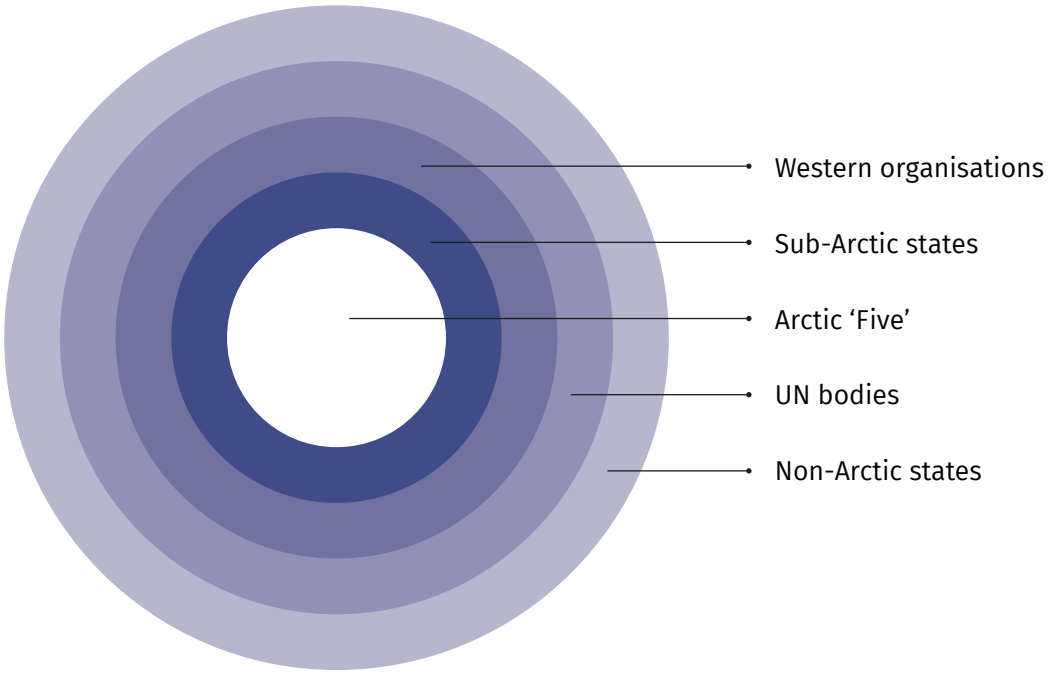
[c] Before the COVID-19 pandemic, both the NSR and NWP were common destinations for Arctic tourist cruises. The so-called cross-polar air routes (especially between North America and Asia) run through the Arctic, which remain popular despite the ban on Western airlines flying over the territory of Russia.

[d] Western countries like Norway, Iceland and Greenland are already aggressively expanding Arctic tourism.

The Stakeholders

Figure 1 visualises the five 'circles' of competition and cooperation in the Arctic.

Figure 1. The Five Circles of Arctic Competition and Cooperation



Source: Authors' own

The Arctic five are Russia, the United States (US), Canada, Denmark, and Norway, all of which compete with each other and with non-Arctic countries for natural resources and control over the maritime transport routes of the Far North. Having a coast along the Arctic Ocean, in accordance with the 1982 UN Convention on the Law of the Sea (UNCLOS), these five nations have preferential rights to develop the resources of the marine Arctic within their territorial waters and exclusive economic zones (EEZs). At the same time, it should be noted that the US, unlike other coastal states, has an Arctic strategy characterised by a reliance on unilateral actions, ignoring (or belittling) those international institutions that are completely beyond their control, including the Arctic Council, the Arctic Economic Council, the Northern Forum, as well as UN specialised agencies dealing with the Arctic. As recent moves by the Trump administration demonstrate,[e] the US does not hesitate to put pressure on its closest allies (for example, Canada or Denmark) to achieve its goals in the region.

[e] Even before his inauguration, Donald Trump announced that he intended to make Canada the 51st US state and purchase Greenland from Denmark. Although these initiatives were unrealistic, they seriously damaged relations with these US NATO allies.

A second group of actors in the region comprise the sub-Arctic states that, having no direct access to the Arctic Circle, nevertheless are either located in close proximity (Iceland) or possess territory located in the Arctic (Sweden and Finland).[f] Also actively involved in Arctic affairs are certain international organisations of Western countries (the North Atlantic Treaty Organization or NATO and the European Union, EU), as well as organisations of Nordic countries.[g]

Comprising the fourth set of stakeholders are the various institutions and programmes of the United Nations (UN): the Commission on the Limits of the Continental Shelf, UN Development Program, UN Environment Program, International Maritime Organization, and UNESCO. These agencies are mandated to act in the interest of the global community, as well as to serve as arbitrator in disputes between Arctic players.

In addition to these four, another fifth and relatively new circle of cooperation and competition in the Arctic has emerged in recent years—the non-Arctic states (primarily East Asian countries, as well as a number of European states), which in the last two decades have also begun to show interest in the development of the region. This inevitably leads to the growth of economic and political tensions in the region, since the Arctic legal regime is not the ideal one and allows some ambiguity regarding the rights of both regional and non-regional actors. For example, under UNCLOS, non-Arctic states do not have the rights to explore and develop natural resources in the EEZs and continental shelves within the national jurisdiction of the 'Arctic Five'. Therefore, they are objectively interested in reviewing the already established legal norms and spheres of influence, and they favour the "internationalisation" of the region, especially of its maritime transport routes and the Central Arctic Ocean, an area located outside the national jurisdiction of coastal states.

The Points of Contention

The following paragraphs outline the past, existing, and potential conflicts in the Arctic region.

Maritime delimitation

Disputes are ongoing over the delimitation of maritime space between the US and Canada in the Beaufort Sea and between Canada and Greenland (Denmark) in the Lincoln Sea. The Canadian-Danish dispute over the delimitation of the Lincoln Sea in the part that concerned the small Hans island was resolved in 2022: an agreement to divide the island nearly in half along a natural fault line was signed by the Danish, Greenlandic, Canadian, and Nunavut governments.

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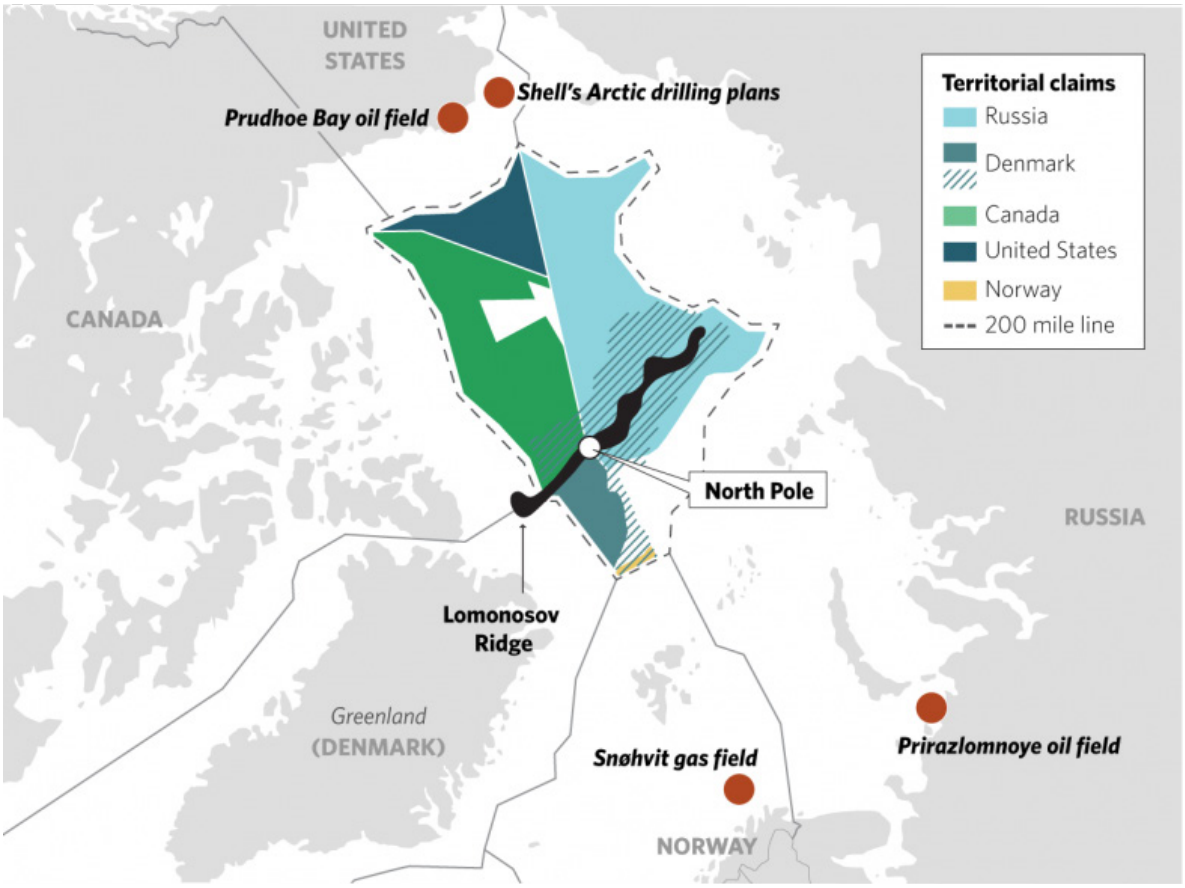
[f] On this basis, these states are included in both the Arctic Council and Barents Euro-Arctic Council (BEAC), the region's leading governance institutions.

[g] These include the Nordic Council, the Council of Ministers of the Nordic Countries, the Northern Investment Bank, and the Northern Environmental Finance Corporation.

Extension of the continental shelf

In 2001, Russia became the first country to apply to the UN Commission on the Limits of the Continental Shelf (CLCS) with a claim on expansion of its shelf in the Arctic Ocean.[h] Moscow claimed sovereign rights over resources on the seabed area of some 1.2 million km^2 outside the 200-mile line. However, the CLCS found Russia's claim to be insufficient. Russia organised comprehensive research expeditions and in 2015, submitted a revised application. The Commission has almost fully approved Moscow's application, with the exception of one small area. Since Russian claims overlap with similar ones to parts of the Arctic shelf of Denmark and Canada, which filed their applications in 2014 and 2019, respectively, Moscow will have to negotiate with them after the Commission decides on their applications.

Map 3. Ongoing Territorial Claims in the Arctic Ocean



Source: Stratfor[10]

[h] According to UNCLOS, a coastal state has exclusive sovereign rights to explore and exploit the natural resources of its continental shelf up to 200 nautical miles from its shores. Beyond this limit, a coastal state has to provide scientific evidence to establish the extent of the legally defined continental shelf up to 150 nautical miles to exercise the same rights.

Other coastal states (except the US which has not ratified the UNCLOS) followed Russia (see Map 3). Norway was the second after Russia to submit its application to the CLCS in 2006 and the first among the Arctic states to get a positive decision from the Commission in 2009. At the end of 2023, the US unilaterally announced the expansion of its continental shelf in the Arctic Ocean and the Bering Sea. This action did not affect Russian interests in the region but was consequential to Canadian claims to a part of the shelf in the Beaufort Sea.

International legal status of the Northern Sea Route and Northwestern Passage

While Moscow and Ottawa believe that they have historical and legal rights to control and regulate navigation through the Northern Sea Route and Northwestern Passage, other countries (including the US and China) insist on the freedom of navigation principle. For example, Moscow defines the NSR as a historically existing national unified transport route of the Russian Federation in the Arctic and therefore considers it to be under its exclusive jurisdiction. Canada considers that it is sovereign over the waters of the NWP on the ground that those waters are internal.

Both Russia and Canada invoke the UNCLOS Article 234, which provides coastal states with the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the EEZ limits, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause massive harm to or irreversible disturbance of the ecological balance.

In order to insist on the international status of the NSR and the NWP, the US initiated the Freedom of Navigation Operation Program (FONOP) back in 1979. So far, Washington has been hesitant to send commercial and military vessels to these maritime areas, as it cannot provide icebreaking escorts and fears a harsh reaction from Russia and Canada. However, the US has not ruled out the possibility of implementing FONOP in the Arctic Ocean when it has the appropriate resources.[11] Both Moscow and Ottawa regard these plans as a serious destabilising factor that could negatively affect the security of the entire region.[12]

Is a Military Conflict Inevitable?

One school of thought believes that the Arctic Five will fight hard for their sovereign rights in the region and push for a further delimitation of the continental shelf and maritime spaces, with Russia and Canada seeking to establish exclusive control over the NSR and NWP. This scenario could lead to the region's remilitarisation. With the outbreak of the

war in Ukraine in 2022, relations between the Western Arctic countries and Russia have deteriorated. The Arctic institutional system has also degraded.[i] The pessimists maintain that even a military conflict cannot be ruled out in the foreseeable future involving both the regional and non-regional actors.

However, regional players do not yet have a sufficiently serious motivation to initiate an armed conflict in the Arctic, and are unlikely to have one in the foreseeable future.[j] All the actors believe that the challenges in the region can be resolved through negotiations and diplomacy rather than by military force. The current regional military buildup is, from the point of view of Arctic actors, more a means of deterring each other than a preparation for a real military conflict.

In Lieu of a Conclusion

This essay argues that the Arctic players will work to resolve existing and potential disputes not by force but through negotiations and international arbitration. Indeed, the countries of the region have more common interests than conflicting ones, and therefore the tendency to cooperate will eventually prevail despite current tensions.

While Western countries may be currently pursuing a confrontational policy in the Arctic, there are still areas that are open to cooperation with all stakeholders, among them: climate action, environmental protection, biodiversity conservation, monitoring ice and permafrost dynamics, search and rescue operations, prevention and dealing with the consequences of natural and man-made disasters, the well-being of indigenous peoples, and sustainable development.

Despite the serious crisis of the regional institutional infrastructure, it would be premature to talk about its collapse. The UN structures—specifically the IMO, UNEP, UNDP, and UNESCO—remain operational in the Arctic. The Northern Forum and the Arctic Economic Council also continue their activities, albeit not as actively as in the earlier years. There are signs of a revival of the Arctic Council's activities at the working group level.

It is safe to assume that after the end of the Ukrainian conflict, which will reasonably happen sooner or later, it is likely that international Arctic cooperation and regional institutional infrastructure will be fully restored and the 'great Arctic game' will end, to the mutual benefit of all players.

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i Its central component, the Arctic Council, is in a semi-frozen state. The BEAC, after Russia's withdrawal from it and Finland's planned withdrawal, may finally disintegrate. The accession of Finland and Sweden to NATO has led to even greater tensions in the region and increased military preparations on both sides.

j It should be taken into account that most of the proven and unproven mineral deposits in the Arctic are located in the EEZ of coastal states which, according to international law, no one can claim. Despite the rhetoric of some countries (namely, the US and China) about the need to turn the NSR and NWFP into global commons, these sea lanes are not among the vital interests of these states that would be worth fighting over.

This research was carried out in the framework of the research project No. 116233367 supported by the St. Petersburg State University.

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Reforming International Financial Institutions: Why Good Policies Matter More for Developing Countries

Karim El Aynaoui, Hinh T. Dinh, and Akram Zaoui

Calls for reforms of the International Financial Architecture (IFA) are foregrounded by the growing financing needs of developing countries, driven by mounting climate-related challenges; conflict and violence; rising numbers of internally displaced persons (IDPs); and macroeconomic imbalances, including crippling debt service and debt distress.

Debates on IFA reforms have particularly centred on International Financial Institutions (IFIs), including the two Bretton Woods Institutions (BWIs)—the International Monetary Fund (IMF) and the World Bank Group (WBG)—as well as other Multilateral Development Banks (MDBs).[1] There are proposals to expand the financial firepower and lending capacity of these institutions through a combination of financial engineering, aimed at optimising MDB balance sheets, and increased capital commitments from developed nations.

However, in the current global political landscape, these efforts face massive obstacles. Geopolitical competition may divert resources away from international cooperation, as advanced economies prioritise military spending and investments in infrastructure, manufacturing, and research, development, and innovation (RD&I) in biomedical, digital, and green technologies. Great-power rivalries could weaken multilateral institutions and governance mechanisms by reducing the willingness to compromise and negotiate.

This essay argues that IFI resources are unlikely to increase remarkably in the short to medium term, even as the financial needs of developing countries continue to grow. Developing nations must therefore mobilise alternative resources beyond traditional official development assistance (ODA), including international private capital and domestic savings.

In this context, IFIs play an increasingly vital role. Over the years, they have accumulated unparalleled knowledge of the policy environments and institutional frameworks necessary for success. This expertise, derived from deep and practical experience across diverse economies, offers developing countries valuable, impartial insights.

Developing nations can leverage this expertise to strengthen domestic capabilities, frameworks, institutions, policies, and projects that attract international private investment, enhance the effectiveness of public spending, and mobilise domestic capital. These efforts, in turn, contribute to well-designed growth strategies, for which these authors have earlier proposed a general framework.[2]

IFIs and MDBs: A Long Tradition of Adaptation and Self-Reform

The WBG, one of the oldest IFIs, was originally designed for post-Second World War reconstruction in Europe and economic development in developing countries. Over time, the WBG expanded its mandate by establishing two affiliates: the International Finance Corporation (IFC) in 1956, and the International Development Association (IDA) in 1960.[a]

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[a] The International Finance Corporation (IFC) was set up to support private sector development, and the International Development Association (IDA), to assist less-credit-worthy nations.

In the 1970s, the WBG shifted its focus to poverty reduction, expanding lending into new sectors such as environmental protection and rural development. During the 1980s and 1990s, it responded to global challenges by promoting structural adjustment policies (SAPs) and supporting pro-market reforms in former Soviet-aligned nations.

Since the late 1990s, the WBG has prioritised sustainable development, community-driven initiatives, climate change mitigation, anti-corruption efforts, and transparency.[b] However, the WBG has faced criticism for neglecting the social consequences of SAPs and enforcing a one-size-fits-all approach under the so-called Washington Consensus.

To be sure, the BWIs have undergone recalibration and self-reform since the mid-1990s, marked by several initiatives. These include the launch of the Heavily Indebted Poor Countries (HIPC) Program in 1996, the introduction of the Strategic Compact and staff decentralisation in 1997, the creation of the Financial Sector Assessment Program (FSAP) and the Poverty Reduction and Growth Facility (PRGF) in 1999, and the establishment of the Capital Markets Consultative Group (CMCG) in 2000 and the Independent Evaluation Office (IEO) in 2001.[c,3]

The strategic reflections continued following the COVID-19 pandemic. During the October 2022 Annual Meetings of the BWIs in Washington, D.C., shareholders called on the WBG to develop a roadmap for addressing poverty reduction, shared prosperity, and global challenges. The resulting roadmap, published in December 2022,[4] focused on Global Public Goods (GPGs), including climate adaptation and mitigation, as well as pandemic preparedness, prevention, and response. Further reforms were proposed in 2023 by the Independent Expert Group (IEG), commissioned by the Indian Presidency of the G20. Their two-volume report advocated for "better, bigger, and bolder" MDBs.[d,5] In 2024, an external advisory group was formed by the BWIs to lead stakeholder consultations on the future of the global economy, international cooperation, and the role of BWIs in ending poverty and fostering shared prosperity on a liveable planet.[e]

The Context: Financing Needs of Developing Countries

The *Financing for Sustainable Development Report (FSDR) 2024* estimates[6] that the annual SDG financing gap in developing countries ranges from US$2.4 trillion to US$4 trillion. The compounded crises of the early 2020s—including the COVID-19 pandemic, the Russia-Ukraine

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b Other MDBs have since followed similar paths.

c More recent milestones include the adoption of the Twin Goals of eradicating extreme poverty and promoting shared prosperity in 2014 , the Forward Look strategy in 2016, the IBRD/IFC capital package in 2018 , and the first WBG strategy on Fragility, Conflict, and Violence (FCV) in 2020. See: https://www.worldbank.org/en/news/statement/2023/01/13/world-bank-group-statement-on-evolution-roadmap

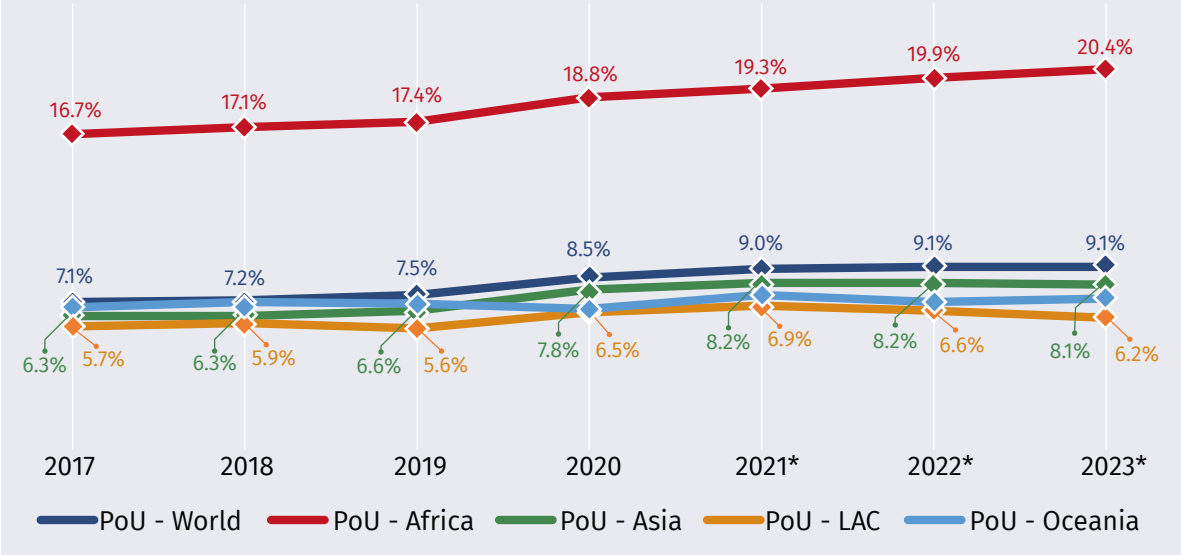
d The progress of MDBs in their reforms is tracked by the Center for Global Development (CGD) through the Multilateral Development Bank Reform Tracker. See: https://www.cgdev.org/media/mdb-reform-tracker

e The group of external advisors is composed of Sri Mulyani Indrawati, Minister of Finance of Indonesia; Patrick Achi, former Prime Minister of Côte d'Ivoire; and Mark Malloch Brown, former Deputy Secretary-General of the UNI. See: https://www.imf.org/en/News/Articles/2024/06/28/pr24250-imf-wbg-announce-joint-bretton-woods-80-initiative. One closed-door meeting under Chatham House Rules was organised in the framework of this initiative at the Policy Center for the New South (PCNS) in February 2025. See: https://www.policycenter.ma/events/bwi-80-dialogue-future-world-bank-group-and-international-monetary-fund

war, and runaway inflation—have placed additional strain on developing nations, worsening public finances and deepening vulnerabilities. Proposed reforms of MDBs are inadequate to meet these financing needs. During the 2024 Spring Meetings of the IMF and the WBG, 10 MDBs announced that balance sheet optimisation measures could generate an additional US$300 billion to US$400 billion over the next decade—equivalent to just US$30 billion to US$40 billion per year—far short of what is required to bridge the SDG financing gap.[7]

Indeed, recent years have seen the erosion of hard-won gains in reducing hunger and extreme poverty. Undernourishment has steadily increased, and in Africa, one in every five are suffering from food insecurity—a trend that accelerated following the pandemic. The prevalence of undernourishment has risen sharply since 2020, making Africa the worst-affected region, where nearly 20 percent of the population faced food insecurity as of 2023.

Figure 1. Prevalence of Undernourishment Globally and in Select Regions (in %, 2017-2023)



Sources: FAO, IFAD, UN F, WFP, WHO. (2024)[8]

Note: Figures for 2021 to 2023 are estimates.

The polycrisis has further strained public finances in developing nations, as governments struggled to cushion its effects while coping with rising interest rates. Public debt in developing countries has increased at roughly twice the rate of that in developed economies. By 2023, external sovereign debt (excluding China) had surged to nearly 2.5 times its 2008 level.[9]

Public debt-to-GDP ratios have risen sharply since 2010. The median ratio in developing countries increased from approximately 35 percent in 2010 to 55 percent in 2023. While the overall median has declined from its pandemic peak (over 60 percent of GDP in 2020), it has continued to rise in Africa, reaching 62 percent in 2023.[f,10]

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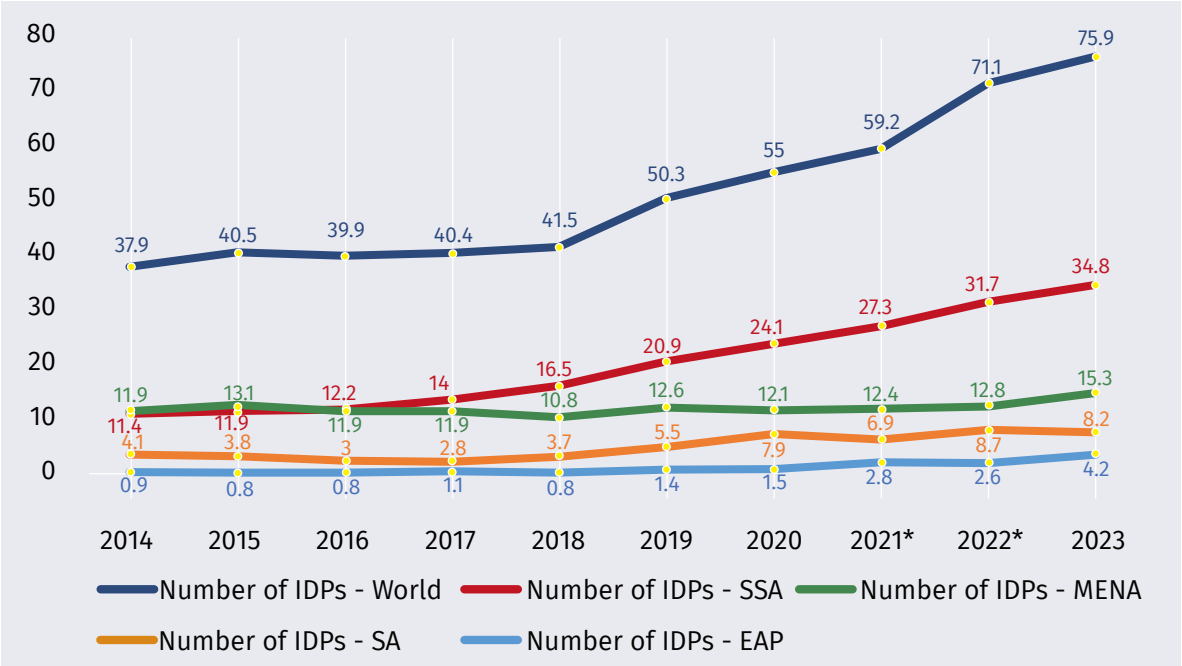
[f] The share of African countries with public debt exceeding 60 percent of GDP grew from 25 percent in 2013 to 46 percent in 2023. As of 31 October 2024, the IMF reported that 11 countries were in debt distress—9 of them in Sub-Saharan Africa (SSA)—while 24 countries were at high risk (including 8 in SSA), 25 at moderate risk, and 7 at low risk.

Another acute challenge confronting developing nations, particularly in Sub-Saharan Africa (SSA), is forced displacement due to both climate-related disasters and conflict. As of 2023, the number of internally displaced persons (IDPs) globally had more than doubled over the past decade, with SSA accounting for nearly half of all IDPs[11] despite having only 15 percent of the world's population. Conflict-driven displacement alone was 70-percent higher in 2023 than the average for the previous decade.[12]

Figure 2. Number of Internally Displaced Persons Globally and by Select Region (in million people, 2014-2023)



Source: IDMC (2024)[13]

Note: EAP: East Asia & Pacific: MENA: Middle East & North Africa; SA: South Asia.

These surging needs are compounded by adverse geopolitical conditions, which are likely to block any meaningful reforms of IFIs and MDBs.

The Geopolitical Obstacles to Substantive IFIs Reform

Geopolitical polarisation is likely to hinder meaningful reforms of IFIs. The following are the key aspects of this polarisation:

The U.S.-China Rivalry. In the United States (US), bipartisan consensus has shifted towards maintaining global primacy, particularly in response to China's rising economic and strategic influence. China's growing share of global GDP, industrial output, military spending, RD&I, and trade—combined with its deep integration into global value chains for clean and critical technologies—has fuelled this competition.

Washington's approach is reflected in its obstruction of appointments to the World Trade Organization's (WTO) Appellate Body and the introduction of new industrial policies such

as the Inflation Reduction Act (IRA) and the CHIPS and Science Act of 2022. Early decisions by the Trump administration to withdraw from the Paris Climate Agreement, the United Nations Human Rights Council (UNHRC), and the World Health Organization (WHO) in 2025 have further reinforced this trend. At the time of writing, even continued US participation in the BWIs—and the implications for their credit ratings—remain uncertain.[14]

Europe's Economic Model Under Pressure. In the European Union (EU), a report led by Mario Draghi, former Italian Prime Minister and European Central Bank (ECB) governor, emphasised the urgent need for increased financial resources to address clean energy, defence, digital technology, and healthcare—sectors essential to competitiveness, innovation, productivity, and welfare.[15] However, financing these priorities, alongside ageing-related social costs and automation-driven job displacement, places additional strain on European governments, limiting their ability to meet ODA commitments.

Defence spending is set to rise among NATO countries, with US President Donald Trump proposing a target of 5 percent of GDP for all 32 members.[16] This goal has already been adopted by Poland[17] and embraced by Baltic states such as Estonia and Lithuania.[18] The increase in European defence budgets comes in response to Russia's military spending surge, which reached 6.7 percent of GDP in 2024—exceeding the total military expenditure of European NATO members combined.[19]

Declining ODA. ODA from high-income countries and other major economies has come under increasing pressure. Excluding contributions to Ukraine and in-donor refugee costs, as well as the tail-end of COVID-19-related aid, total ODA from the 32 member states of the Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) declined by 2 percent in 2023 compared to 2019.[20] In 2023, total ODA stood at US$223.3 billion. Had all DAC countries met their 0.7 percent Gross National Income (GNI) commitment, an additional US$196 billion—roughly 5 percent of the SDG financing gap—would have been available.

The early 2025 freeze of US Agency for International Development (USAID) operations further underscores a shift in Western conservative-populist movements away from international development cooperation.[g] Given these trends, it is reasonable to assume that official external resources available to developing countries will not increase in the next five years. This makes it imperative for these nations to explore alternative financing sources, particularly in international private capital markets.

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[g] An illustration of this posture can be found in reports from conservative think tanks in the US. See: https://www.heritage.org/progressivism/commentary/how-usaid-went-woke-and-destroyed-itself

Developing Countries and IFIs: Towards a New Paradigm in the Relationship

This section explores how the relationship between developing countries and IFIs can, and should, evolve.

Priority Areas of Joint Action and Collaboration

The future of cooperation between IFIs and developing countries should centre on four priority areas that require urgent attention. Addressing these challenges can effectively generate benefits in the short to medium term.

A pillar of this collaboration must be climate change adaptation and mitigation. IFIs should assist developing countries in managing climate risks and transitioning to low-carbon economies by facilitating access to climate finance and promoting innovative mechanisms such as debt-for-climate swaps. Beyond financing, they should provide technical expertise on climate-smart agriculture, energy efficiency, and renewable energy while supporting the development of carbon pricing mechanisms and green investment strategies.

Equally critical is the issue of debt sustainability and fiscal resilience. IFIs should offer technical assistance to help developing countries strengthen debt management and enhance fiscal stability. This support should include advocating for transparent debt practices and taking a more proactive role in debt restructuring to prevent financial crises and ensure macroeconomic stability.

Digital public infrastructure (DPI) presents another transformative opportunity for developing economies. India's success in this area offers valuable lessons on how DPI can improve public service delivery, foster competitive markets, and drive innovation. IFIs should help developing countries adopt a needs-based approach to digital transformation, ensuring that digital ecosystems are inclusive, rights-preserving, and sustainable. Additionally, they should assist in assessing infrastructure readiness and establishing governance frameworks to guide this transition.

Finally, addressing the growing challenge of IDPs is becoming increasingly urgent, particularly in Sub-Saharan Africa, where displacement due to conflict and climate-related disasters continues to rise. IFIs should provide financial and technical assistance to host countries, enhancing infrastructure and public services in affected areas. In parallel, they should support programmes that foster economic opportunities and promote social inclusion for IDPs while strengthening local governance capacity to manage displacement effectively.

By prioritising these areas, IFIs and developing countries can create a more resilient, sustainable, and inclusive development framework that responds to today's most pressing challenges.

Mobilising Private Capital

As ODA plateaus and faces increasing constraints, developing countries must find more effective ways to engage the private sector. IFIs can provide crucial expertise in designing strategies to mobilise private capital and foster sustainable private sector participation in development efforts.

IFI assistance can operate at multiple levels, depending on a country's stage of economic development and specific needs. At the macroeconomic level, particularly for low-income countries (LICs), the focus should be on ensuring macroeconomic stability to create a favourable investment climate. At the sectoral level, IFIs should work to identify and address sector-specific constraints that hinder private capital inflows, whether from foreign or domestic sources. At the project level, assistance should be directed toward establishing institutions for project selection, appraisal, and evaluation to maximise investment efficiency.

For middle-income countries (MICs), IFI support may concentrate more on sectoral and project-level interventions. This approach represents a shift from traditional practices in several ways. First, it redefines economic development in terms of concrete, measurable short- and medium-term goals for resource mobilisation. Second, it moves away from a one-size-fits-all model by tailoring IFI assistance to each country's unique needs. Finally, it emphasises efficiency, ensuring that every dollar of IFI support is strategically leveraged for the greatest possible impact.

Beyond policy support, IFIs should act as catalysts by offering guarantees and risk mitigation instruments to attract private investors. They can also facilitate public-private partnerships (PPPs), which combine public and private resources to finance essential infrastructure and services. Additionally, innovative financing mechanisms such as blended finance—which merges public and private funds—should be promoted to stimulate investment in high-impact sectors.

Another critical priority is fostering responsible and sustainable business practices. IFIs should provide technical assistance to help companies integrate environmental, social, and governance (ESG) standards, ensuring that investments align with long-term development goals. They should also support the development of local supply chains and facilitate technology transfers, enabling domestic businesses to access global markets and innovation. By strengthening private sector engagement, IFIs can help bridge funding gaps, enhance economic resilience, and promote inclusive, sustainable growth in developing countries.

Indeed, the past two decades have seen the rise of financial actors with unprecedented capital resources. By the end of 2023, the top 500 asset management firms managed US$128 trillion in discretionary assets—an increase of 12.5 percent from 2022.[21] Moreover, private equity deal-making reached US$2 trillion in 2024,[22] while sovereign wealth funds managed US$1.8 trillion in the same year.[23]

Additional capital flows are being fuelled by trade surpluses—China alone recorded a nearly US$1 trillion surplus in 2024—and energy windfalls, such as Qatar's expanding liquefied natural gas (LNG) projects. Meanwhile, the speculative investment appetite of retail investors, as seen in the cryptocurrency market, suggests that substantial savings could be redirected toward high-return, productive sectors such as computing power, renewable energy, and utilities like clean water and transportation infrastructure.

Moving forward, the relationship between IFIs and developing countries must evolve to become more targeted and strategic. IFIs should prioritise technical assistance in key areas that support pro-growth strategies, helping developing nations strengthen their domestic capacities, frameworks, institutions, and policies to attract private investment and mobilise sustainable development financing.

Recommendations for Developing Countries

Building on the post-Washington Consensus economic framework outlined earlier in this article,[24] developing countries must adopt a new approach to engaging with IFIs. They should collaborate with IFIs to design domestic growth strategies rooted in their comparative advantages, ensuring that economic policies align with national strengths and potential. Maintaining fiscal responsibility, practicing prudent debt management, and strengthening institutional integrity and governance are essential for preserving credibility and fostering investor confidence. Enhancing inclusive and transparent decision-making will build trust and ensure that policies reflect broader societal interests, allowing economic frameworks to adapt to global uncertainties without compromising long-term growth.

Harnessing technology to boost productivity is another priority. By fostering digital transformation, encouraging innovation, and expanding access to modern infrastructure, countries can unlock efficiencies and enhance competitiveness in global markets. Investing in education and skills development is essential to ensure that technological advancements translate into broad-based economic gains.

Sustained growth also requires structural transformation—shifting from reliance on low-value-added sectors to higher-productivity industries. This involves diversifying exports, supporting industrial upgrade, and fostering an environment conducive to entrepreneurship and investment in high-growth sectors. Strengthening supply chains, integrating into global trade networks, and building linkages between agriculture, manufacturing, and services will drive long-term prosperity.

Financial sector development should focus on mechanisms that efficiently allocate resources towards economic complexity, fostering innovation, and driving productivity gains. Incorporating science and technology into decision-making and public policy will enhance efficiency and responsiveness to development challenges. Strategic investments in connectivity, green infrastructure, and human capital will lay the foundation for sustainable growth and long-term competitiveness.

Rather than passively adopting external prescriptions, developing countries should engage with IFIs strategically, shaping financing and advisory services to align with their unique economic trajectories. This approach reinforces sovereignty while leveraging global expertise for national development.

Recommendations for IFIs

IFIs should strategically allocate their resources to maximise impact across key policy areas. A priority must be enhancing technical assistance to help developing countries attract private investment, implement governance reforms, and strengthen institutions. By equipping governments with the necessary expertise, IFIs can foster more resilient and dynamic economies. For example, instead of merely financing infrastructure projects, IFIs should focus on establishing institutions for project selection and execution in recipient countries. By doing so, they can enable the identification of viable road projects, which can then attract funding from emerging sources of capital. While this objective was sometimes implicit in past projects, it was never explicitly defined or made a measurable goal. This shift in approach will influence how IFI performance is evaluated, requiring adjustments over time.

Beyond technical support, IFIs should act as impartial advisors, offering evidence-based policy recommendations tailored to each country's context. Facilitating policy dialogue and knowledge sharing will ensure that development strategies are responsive to local challenges. Additionally, IFIs must play a catalytic role in mobilising private capital by providing guarantees and risk mitigation instruments, making investments in critical sectors more attractive to private investors.

Collaboration with public institutions is also essential. IFIs should focus on building trust among member countries, fostering cooperation, and overcoming political barriers that hinder coordinated action. A decentralised, client-centric approach will help tailor assistance to each country's needs, making IFI support more effective and responsive to national priorities.

For middle-income countries, IFIs should adopt a differentiated approach, recognising their distinct challenges and development paths. Providing incentives for reform and offering customised support will help these countries sustain progress and avoid stagnation. IFIs must also prioritise the climate-development nexus, investing in climate adaptation and mitigation, promoting green technologies, and supporting sustainable development practices. By focusing on these strategic areas, IFIs can enhance their effectiveness, strengthen partnerships, and better support developing countries in achieving inclusive and sustainable growth.

Conclusion

Global challenges call for a paradigm shift in the relationship between IFIs and developing countries. Rather than relying primarily on international assistance, developing nations should leverage technical expertise to mobilise private capital—both foreign and domestic—for development.

In turn, IFIs must prioritise technical assistance, institution-building, and private capital mobilisation to help countries achieve sustainable and resilient growth. To maximise these opportunities, developing nations must proactively strengthen their domestic capacities and engage strategically with IFIs to advance their development goals.

In an increasingly fragmented global landscape, strong government leadership and committed public actors are essential to making the most effective use of the limited resources available from IFIs.

Endnotes

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There are other, smaller RDBs, such as the Eurasian Development Bank (EDB). There are also Sub Regional Development Banks (SRDBs), which include institutions such as the Caribbean Development Bank (CDB) and the Central American Bank of Economic Integration (BCIE) in the Americas. In Africa, SRDBs include "the Southern African Trade [and] Development Bank ([former]ly referred to as the PTA Bank), East African Development Bank (EADB), West African Development Bank (BOAD) and Ecowas Bank for Investment and Development (EBID)". One can also mention the Pacific Islands Development Bank, in Oceania. See: https://www.climatepolicyinitiative.org/gca-africa-adaptation-finance/actors/sub-regional-development-banks-srdbs-2/

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