

Re:vision

Munich Security Report 2023

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MUNICH SECURITY REPORT 2023 FOREWARD

Foreword



Christoph Heusgen

Dear Reader,

Just a few days after last year's Munich Security Conference concluded, Russia began its unprovoked and brutal aggression against Ukraine. Since that fateful decision, the world has changed dramatically. As German Chancellor Scholz famously noted, the Russian invasion marks a *Zeitenwende*, a watershed, which forces us to rethink previous assumptions. *Zeitenwende* incidentally was also the name of an MSC Report published in October 2020 calling for a more robust approach in German foreign policy. As the changes in the Munich Security Index – an exclusive annual index of risk perceptions, which we developed together with our partner Kekst CNC – indicate, people around the world feel that we are indeed witnessing a turning point for world politics, and have adapted their views as a result.

The invasion of Ukraine also reveals a few simple things. First, Vladimir Putin's decision to use military force against a peaceful neighbor has demonstrated that powerful actors believe they can ignore even the minimum standards of international law, such as the principle of territorial integrity. As the chapters of this Munich Security Report show, the Russian war against Ukraine is just the most brazen attack on the rules-based order. Revisionist actors are trying to undermine the status quo and change the international order in many different ways.

Second, we are far from helpless. Revisionism can be resisted. The Ukrainian people, first and foremost, have demonstrated a remarkable resilience and determination in the face of blunt aggression. The vast MUNICH SECURITY REPORT 2023 FOREWORD

majority of UN member states have condemned the invasion and the attempted annexation of Ukrainian regions, and many countries have introduced sanctions against Russia and provided Ukraine with political, economic, and military support. However, Ukraine has not won the war yet, and will need the support of all those who believe in the rule of law.

Third, the fact that a considerable number of actors have not condemned Russia's aggression shows that it is not enough for us to simply defend the status quo. If we do not address the resentment that countries in Africa, Latin America, and Asia feel toward the international order, which has not always served their interests, we will struggle to win the fence-sitters as allies in the defense of key rules and principles. As this report argues, we need a vision of the international order that more people can subscribe to, as well as a larger coalition of responsible stakeholders, if we want to preserve the core principles of this order. At this year's Munich Security Conference, we will thus not only focus on pushing back against revisionism, but also on creating a positive vision for a more peaceful and prosperous world.

This year's conference is also a *Zeitenwende* for the MSC, as Wolfgang Ischinger, after 14 years at its helm, has handed over the chairmanship to me. I am deeply grateful to him and look forward to building on his legacy – together with the wonderful MSC team and all of you.

Yours,
Ambassador Christoph Heusgen
Chairman of the Munich Security Conference





Executive Summary

Debates about different visions for the future international order are often abstract and theoretical. By invading Ukraine, Russian President Vladimir Putin has made the clash of competing visions a brutal and deathly reality. The world's liberal democracies are awakening to the challenges posed by autocratic revisionists, and have taken the first important steps to pushing back. But for liberal-democratic principles to prevail over the autocratic variants, democracies must revamp their vision of a desirable international order. A re-envisioned liberal, rules-based international order is needed to strengthen democratic resilience in an era of fierce systemic competition with autocratic regimes. But to make this vision more attractive among the wider international community and help it win the contest for the future international order, democracies must also take into account legitimate criticism and concerns among the wider international community.

On February 24, 2022, Russia not only launched a war against Ukraine that has already caused tens of thousands of Ukrainian civilian casualties, forced millions to flee their homes, and inflicted war damages of hundreds of billions of euros. With its brutal and unprovoked invasion of a sovereign state, Moscow has also mounted an attack against the foundational principles of the post—World War II order. The attempt by an authoritarian power to eliminate a democracy as a sovereign nation-state is not the only sign, however, that autocratic revisionism is intensifying. China's tacit support for Russia's war, its military posturing to assert its own sphere of influence in East Asia, and its comprehensive efforts to promote an autocratic alternative to the liberal, rules-based international order epitomize the broader autocratic challenge. When asked about the main fault line in global politics today, the most prominent divide mentioned among those surveyed for the Munich Security Index 2023 is indeed that between democracies and dictators.

However, the relevance of the democracy–autocracy cleavage varies across policy fields. Whether a country is a democracy or not is clearly not the only factor that shapes the contest for the future international order. The mere fact that many governments from Africa, Latin America, and Asia have not been willing to speak up against Russia's aggression shows that powerful

MUNICH SECURITY REPORT 2023 EXECUTIVE SUMMARY

autocrats are not alone in their deep dissatisfaction with existing international norms and institutions – and that simply defending the status quo is not enough to effectively push back against autocratic revisionists.

Human rights (Chapter 2) have been a major flashpoint in the growing systemic competition. China, supported by Russia, is at the forefront of broader authoritarian pushback against international human rights and the mechanisms built to protect them. The vision that Beijing is pursuing, Western observers worry, is nothing less than to create a world safe for autocracy. Among others, China seeks to ensure that collective rights, as defined and upheld by the state, take precedence over individual civil and political liberties. But disagreement on human rights is also evident within and among the democratic states of the world. Certainly influenced by the experience of Western colonialism and imperialism, many non-Western democracies show greater concern for sovereignty and non-interference than their Western counterparts, and are thus reluctant to support robust action in the name of human rights.

Global infrastructures (Chapter 3) have likewise become an important site of geopolitical competition. Democratic and autocratic camps openly compete to imbue physical and digital infrastructures with their governance visions. In the digital realm, China is spearheading a group of autocratic states intent on promoting their techno-authoritarian vision, while the transatlantic partners are only gradually converging on a shared vision of an open digital infrastructure. Regarding the global trade infrastructure, the fault lines are messier. Many governments are increasingly viewing interdependencies as both vulnerabilities and conduits for coercion. As a result, weaponization of trade links abounds, while all major powers are increasingly resorting to protectionism. A new vision for global trade infrastructure that serves mutual prosperity while limiting vulnerabilities is not yet in sight.

Development cooperation (Chapter 4) has not been spared from systemic competition either. Health and food security as well as climate finance have become key policy fields where competing narratives of a desirable development order are playing out. Beijing is promoting its own model of development cooperation, supposedly free from conditionalities, as a distinct alternative to the US and European models, which emphasize the importance of democracy, good governance, free markets, accountability, and transparency. But while China's growing engagement falls on fertile ground in many developing countries, this is often less a matter of conviction than of a lack of alternatives and deep grievances with the existing development order that has not yielded sufficient benefits.

MUNICH SECURITY REPORT 2023 EXECUTIVE SUMMARY

Even if it does not neatly display a democracy-autocracy fault line, the new energy order (Chapter 5) increasingly reflects geopolitical considerations rather than market logic. Russia's autocratic revisionism and its weaponization of fossil fuel exports have made energy dependency on autocratic great powers a major concern for Western liberal democracies. They now need to ensure that their efforts to wean themselves off Russian oil and gas do not simultaneously further increase their dependence on other autocracies, including China (for critical raw materials) and Qatar (for gas).

Revisionist autocracies present various challenges to the nuclear order and strategic stability (Chapter 6). Most importantly, Russian threats of using nuclear weapons in the war against Ukraine have raised concerns around the globe. China has significantly invested in additional nuclear capabilities without increasing transparency. And North Korea and Iran present their own challenges to the nuclear order. Given the deteriorating security environment, democratic nuclear powers have reiterated their commitment to nuclear deterrence, while the prospects for arms control initiatives have dimmed. Disappointment with the lack of disarmament, in turn, has led to frustration in many parts of the world, including in the "Global South," where many countries envisage a different kind of nuclear order.

World leaders may not agree on much these days - but many of them share the sentiment that the world is entering a critical decade in the contest for the future international order. While 2022 will be remembered for ramped-up autocratic revisionism, it has also demonstrated that revisionists can be resisted and that liberal ideas are still able to inspire. The extraordinary resilience and determination of the Ukrainian people, as documented in the Munich Security Index 2023 (Spotlight Ukraine), has galvanized international support for their country's struggle against the aggressor and instilled a new sense of purpose into democratic countries and governance formats. Liberal democracies need to use this momentum. If they succeed in re-envisioning the liberal, rules-based order as one that better represents the many countries in the world that have hitherto been confined to the role of rule-takers, as one that better delivers on its promises, and as one that truly benefits everyone equally, they may enlarge the coalition of committed stakeholders and render the order much more resilient. If the revisionist moment we are currently experiencing spurs the renewal of this liberal, rules-based order, President Volodymyr Zelenskyy and the people of Ukraine will have played a big part in this achievement.



Introduction

(1) Re:vision

What are the consequences of Russia's war on Ukraine? Is the world witnessing a revisionist moment? What are the main fault lines in the global contest of different visions for the future of the international order? And how can the coalition defending the vision of a liberal, rules-based order be enlarged and strengthened?

Re:vision

Tobias Bunde and Sophie Eisentraut

On February 24, 2022, Russia not only launched a war against Ukraine; with its brutal and unprovoked invasion of a sovereign state, it also mounted an attack against the foundational principles of the post–World War II order.¹



"This battle is not only for the territory – for this or another part of Europe. This battle is not only for life, freedom, and security of Ukrainians or any other nation, which Russia attempts to conquer. This struggle will define in what world our children and grandchildren will live and then their children and grandchildren."²

Volodymyr Zelenskyy, Ukrainian President, US Congress, December 22, 2022



"We are in the midst of a strategic competition to shape the future of the international order."8

Joseph Biden, US President, preface to the US National Security Strategy, October 12, 2022 Since the beginning of the full-scale invasion, tens of thousands of Ukrainian civilians have been killed, millions have been forced to flee their homes, and war damages have run into the hundreds of billions of euros.3 Russia's revisionist war has cost innocent lives throughout Ukraine's territory - from the Donbas to the Western *oblasts* (Figure 1.1). While there are innocent victims in every war, Russia's aggression is extraordinarily brutal. War crimes are not just a byproduct of the war, but an essential feature of Russian warfare in Ukraine. In clear violation of humanitarian law, the Russian military continues to attack not just military targets, but often aims at civilian infrastructure to increase human suffering and break the Ukrainian resistance. Countless cases of sexual violence committed by Russian soldiers and mercenaries are documented, and Russian authorities have abducted thousands of Ukrainian children.4 On Russian TV shows, analysts casually fantasize about nuclear escalation or call for ever more punishment against Russia's neighboring country.5 Compassion with Ukrainians seems almost completely absent in Russian society.6 With the ruthlessness of its aims and the brutality of its means, this Russian war evokes memories of the worst episodes in European history.

Debates about different visions for the future international order and its guiding principles – at the Munich Security Conference or elsewhere – are often abstract and theoretical. But the plight of the Ukrainians demonstrates that the clash of different visions can become a matter of life and death. Even for many people not directly affected, the Russian invasion represents what German Chancellor Olaf Scholz has called a *Zeitenwende*, a watershed. In all countries polled for the Munich Security Index, except for Japan, majorities see the Russian invasion as a turning point in world politics (Figure 1.2). But where is world politics turning?

The Revisionist Moment: Russia and China and Their Autocratic Vision Russian President Vladimir Putin has long complained about a world order ostensibly dominated by the West – especially by the United States.9 For him, the war represents "the beginning of a radical breakdown of the US-style world order [and] the transition from liberal-globalist American egocentrism to a truly multipolar world." A Russian victory in Ukraine, and the failure

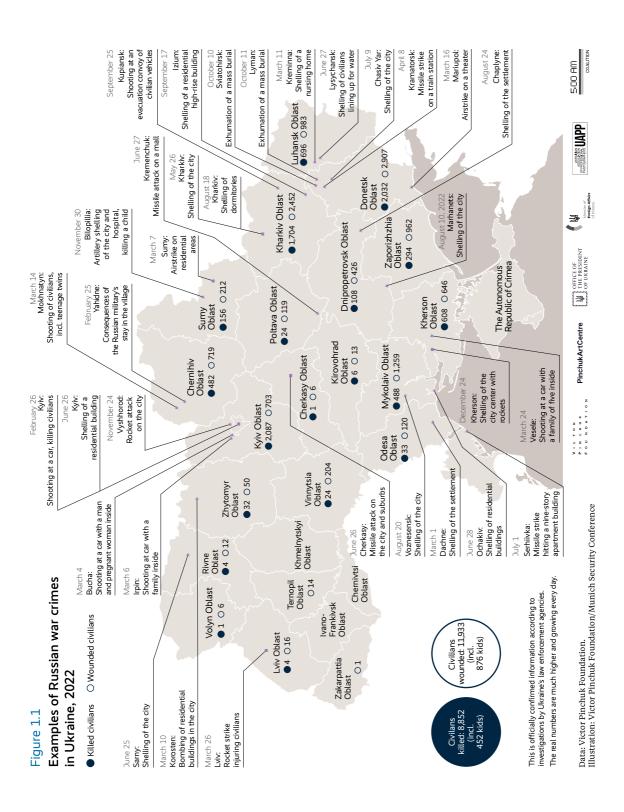


Figure 1.2
Citizens' views on the invasion of Ukraine as a turning point in world politics, October–November 2022, percent

Do you agree or disagree that the invasion of Ukraine is a turning point in world politics?

Agree	Neither/don't know	Disag	ree	
Ukraine		87		7 5
	68		24	8
Italy	CF		27	0
Germany	65		27	8
South Africa	60		30	10
	59		32	10
India	58		34	8
UK	36		34	0
Canada	58		36	6
Chin	57		30	13
China	56		32	12
France				
US	55		35	10
Brazil	53		36	10
	45		46	9
Japan				

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference





"The current developments in the world are not so much about Ukraine as about attempts to shape a new international order."¹²

Sergey Lavrov, Russian Foreign Minister, MGIMO University, March 23, 2022 of the West to prevent it, would be "a potent symbol of a new post-Western era, the collapse of the old order and the rise of a new, authoritarian-friendly multipolarity." 11

Putin's war would have been less likely if this vision were not supported by a much more powerful revisionist, who shares the Russian leader's core grievances with the liberal thrust of the international order and his desire for a sphere of influence: Chinese President Xi Jinping. Just a few weeks before Moscow invaded Ukraine, Putin and Xi issued a joint statement about the beginning of a "new era," characterized by much deeper Chinese–Russian cooperation. According to the statement, both countries share a



"I think [the Russia-China joint statement] is the culmination of a long-standing campaign. It's an act of defiance. It's a clear revisionist manifesto. It's a manifesto to review the world order." 16

Josep Borrell, EU High Representative, Munich Security Conference, February 20, 2022



"External attempts to suppress and contain China may escalate at any time. [...] We must [...] be more mindful of potential dangers, be prepared to deal with worst-case scenarios, and be ready to withstand high winds, choppy waters, and even dangerous storms." 19

Xi Jinping, Chinese President, 20th Party Congress, October 16, 2022 friendship "without limits," which includes "strong mutual support for the protection of their core interests." In this spirit, Beijing has not only refused to condemn Russia's war of aggression; Chinese media has also amplified Russian war propaganda, blaming NATO for the start of the war and "shrouding the Russian regime's culpability." It may be true that Beijing has also been careful not to associate itself too closely with Russia's war on Ukraine. At times, it has even distanced itself from Moscow and publicly condemned Russian threats to use nuclear weapons. But given the close coordination of the world's most powerful autocrats in response to the war in Ukraine, it is difficult not to see the Russian invasion through the lens of a broader contest between different visions for the international order.

Chinese–Russian collaboration to subvert and reshape elements of the international order are hardly a new phenomenon. For many years, both countries, with China in the driver's seat, have been trying to bring about an order that favors non-democratic forms of governance and the narratives and interests of autocrats in the international system – a world, in short, "where liberal values carry no merit or moral freight in their own right." To this end, Moscow and Beijing have often coordinated their votes at the United Nations. In the realm of human rights, which has recently seen Beijing prevent the discussion of a UN report documenting massive human rights violations committed against Xinjiang's Uyghur Muslims, this joint effort has been particularly obvious (Chapter 2). But efforts to push back against liberal rules and principles and replace them with autocratic ones has also been evident in many other realms of the international system (Chapter 3 and 4).

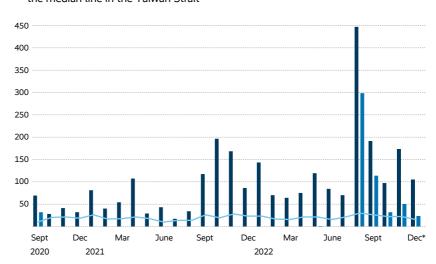
Yet none of their efforts to revise existing elements of the post–World War II order have been as fundamental and brazen as Russia's attack against the principles of non-aggression and territorial integrity. Putin has left no doubt that in his attempt to reestablish the Russian empire, he no longer feels bound by even the minimum standards of international law. Instead, he seeks to replace them with 19th-century principles of unconstrained power politics that allow big countries to carve out regional spheres of influence, irrespective of the wishes of local populations.¹⁸

Just as Moscow seeks to dominate Russia's "near abroad," Beijing has tried to assert its sphere of influence in East Asia, often by selectively interpreting international law. Although it promised a "one country, two systems" model for Hong Kong, China introduced a national security law in 2020 that has effectively reduced Hong Kong's autonomy. ²⁰ Beijing has also doubled down

on its policies in the South China Sea, fortifying its artificial islands, pushing more ambitious territorial claims, and intimidating its neighbors. ²¹ It has refused to accept the 2016 ruling of the Arbitration Tribunal in the South China Sea Arbitration case, which rejected China's expansive maritime claims. ²² Perhaps most importantly, the Chinese government has intensified the pursuit of unification with Taiwan. ²³ While Xi stressed that China would continue to seek a peaceful solution, he also warned that China would "never promise to renounce the use of force" and "reserve the option of taking all measures necessary." ²⁴ In the past year, Beijing massively stepped up its military intimidation of Taipei, including via repeated incursions into Taiwan's air defense identification zone (Figure 1.3) and increased military activities in the Taiwan Strait. ²⁵ This Chinese belligerence has provoked a significant rise in the perceived risk of China invading Taiwan among the respondents surveyed for the Munich Security Index. ²⁶ Some analysts fear that Chinese

Figure 1.3
Escalating military intimidation of Taiwan by the Chinese People's Liberation Army (PLA), September 2020–December 2022

- Number of PLA aircraft entering
 Taiwan's air defense identification zone
- Number of PLA aircraft crossing the median line in the Taiwan Strait
- Number of days with PLA aircraft entering Taiwan's air defense identification zone



*Data includes events up to (and including) December 20, 2022. Data: Mercator Institute for China Studies. Illustration: Munich Security Conference





"I myself have a strong sense of urgency that 'Ukraine today may be East Asia tomorrow."²⁹

Fumio Kishida, Japanese Prime Minister, IISS Shangri- La Dialogue, September 21, 2022 leadership might adopt a more hawkish foreign policy to distract from looming economic woes. Together with the consolidation of Xi's power, with fewer checks and balances, and his "securitization of everything," this could prove a toxic cocktail. Russia's war against Ukraine is "the 21st century's first imperial war," but it may not be the last.

Although Chinese and Russian aspirations are clearly at odds with the principles of sovereign equality and territorial integrity, both countries like to portray themselves as defenders of the UN Charter. Aware that their attempted authoritarian overhaul of the international system requires support in the "Global South," Russia and China purport to envision a multipolar world that grants greater say to other centers of power beyond the traditional West.

Yet Sino-Russian revisionism is now facing resistance. China's assertive policies are already producing a backlash that is undermining Beijing's global ambitions. Moreover, the humiliating setbacks that Ukrainian forces have inflicted on the Russian offensive, together with international sanctions, have weakened Russia's military and economy while also dealing a blow to the image of competent authoritarian rule. Recent protests in China – and also in Iran – suggest that "the inevitable overreach by societies who try to control human beings is ultimately not sustainable. Moreover, evidence is mounting that there are more limits to the supposed "no limits" partnership than Beijing and Moscow would like to admit. It is thus far from clear whether authoritarian great powers will emerge stronger from the war in Ukraine. But even if they don't, there is no room for complacency. The past year provided ample evidence on how enormously disruptive and destructive authoritarian revisionism has become.



"Beijing's vision would move us away from the universal values that have sustained so much of the world's progress over the past 75 years."30

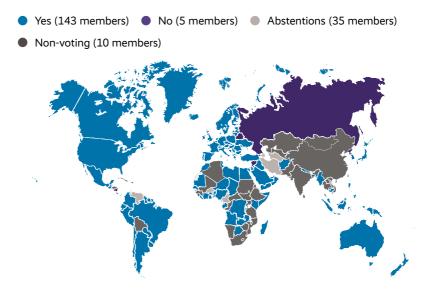
Antony Blinken, US Secretary of State, George Washington University, May 26, 2022

Acquiescence in Revisionism: The Order Going South

Notwithstanding unequivocal violations of the UN Charter, many countries in Africa, Asia, and Latin America have proven unwilling to speak up against Russia's brutal attack and isolate Moscow economically and diplomatically. Often called "fence-sitters," the new "non-aligned," or "hedging middle," a significant number of states have refused to take sides in the war against Ukraine. Hatch, while the overwhelming majority of countries condemned Russia's invasion (141 countries) and the attempted annexation of additional parts of Ukraine (143 countries) in votes at the UN General Assembly in March and October (Figure 1.4), those that abstained or voted against the condemnation – among them large and influential countries such as India and South Africa – are home to almost 50 percent of the global population. The same state of the same state of the global population.

Figure 1.4

Voting summary, UN General Assembly resolution on "The Territorial Integrity of Ukraine: Defending the Principles of the Charter of the United Nations," October 12, 2022



Data: United Nations. Illustration: Munich Security Conference



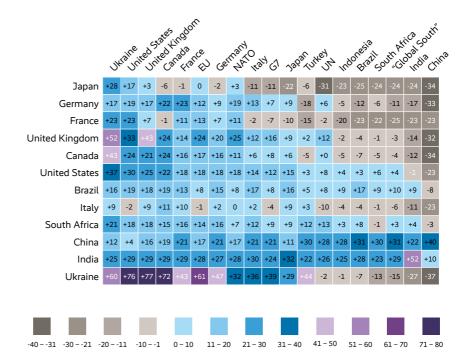
"Russia's war marks a new reality. It requires each and every one of us to take a firm and responsible decision, and to take a side."³⁶

Annalena Baerbock, German Foreign Minister, Eleventh Emergency Special Session of the UN General Assembly, March 1, 2022 Given the massive ripple effects of Russia's war, especially for poorer countries, it is hardly surprising that material support for Ukraine has only come from the world's rich democracies and that few other countries have introduced sanctions against Russia. In fact, not a single state from Africa or Latin America is part of the loose coalition that has imposed sanctions on Russia.³⁷ But many politicians in the West were bothered by a perceived lack of empathy for Ukraine, the reluctance to take a stand against the violation of key norms and principles, and the fact that some governments even exploited Russia's war to advance their countries' economic interests. From the dominant Western perspective, many countries in the "Global South" were wittingly or unwittingly complicit in Russian efforts to weaken international norms.³⁸ Disappointment with the way Brazil, South Africa, and India – and the "Global South" more broadly – have responded to the Russian invasion is also evident in the results of the Munich Security Index (Figure 1.5).

Figure 1.5

Evaluation of the response to Russia's invasion of Ukraine by citizens of different countries, share saying the country or organization has "done well" minus share saying it has "done badly,"

October–November 2022, percent



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



Yet it would be too simplistic to conclude that the "Global South" has turned against the existing order. There are many examples of countries from the "Global South" that spoke up against Russia's attack of key principles of the post–World War II order. Kenya's Permanent Representative to the UN Martin Kimani launched a passionate defense of the norm against territorial conquest, while the Permanent Representative of Fiji to the UN Satyendra Prasad strongly criticized Russia's invasion as a clear violation of the UN Charter.³⁹ Moreover, almost every Pacific Island state voted in favor of the March 2 resolution.⁴⁰ For these and other small



"Russia's attack on Ukraine [...] is a flagrant violation of the United Nations Charter. It is bad for every country, but especially for small states like Singapore. Our security, our very existence, depend on the international rule of law."41

Lee Hsien Loong, Singaporean Prime Minister, May Day Rally, May 1, 2022 countries, the end of their legal guarantee of territorial integrity would be particularly worrisome.

Even among the countries unwilling to unambiguously side with Ukraine, there are stark differences, with each state possessing "its own unique set of interests, concerns, and objectives" with regard to Russia and the broader international order.⁴² These may include the desire to stay on the sidelines of growing geopolitical rivalry; a perception of the war as a conflict exclusively between Europeans over European security; and vulnerability to Russian coercion that comes with dependence on Moscow. 43 They may also include a preoccupation with what governments regard as more proximate threats, including food insecurity. In fact, the repercussions of Russia's war, such as rising prices for food and energy, have disproportionately harmed countries from the "Global South" - a fact that Western states did not take seriously enough at first.⁴⁴ At the same time, other influential states such as India, Turkey, or Saudi Arabia are quite actively hedging their bets in the current geopolitical standoff - both when it comes to Ukraine but also on many other policy issues. 45 Rather than being guided by deep feelings about the international order, their responses to the war in Ukraine and their stances in the broader international contest over the international order seem to be guided by much more pragmatic reasoning.46

Yet frustrations about the existing order abound in Africa, Asia, and Latin America. It would be far too easy to trivialize these resentments as irrelevant to states' responses to the war in Ukraine – or as insignificant to their behavior in other arenas of the global order contest. Many of these countries "have steadily lost faith in the legitimacy and fairness of the international system," which has neither granted them an appropriate voice in global affairs, nor sufficiently addressed their core concerns. Most recently, this has included too little help with rising food prices, access to energy, the acquisition of Covid-19 vaccines, mounting sovereign debt, and the consequences of the climate crisis (Chapters 4 and 5).

To many states, these failures are deeply tied to the West. They find that the Western-led order has been characterized by postcolonial domination, double standards, and neglect for developing countries' concerns, rather than by liberal principles and true multilateralism. ⁴⁹ Thus in many parts of the world, the concept of a "multipolar" or "post-Western" order does not need much advertising. The West's immediate response to the war in Ukraine certainly did not help. Rather than assisting countries in tackling spiking

food and energy prices, the West reprimanded them for not showing enough solidarity with Kyiv. For countries that have experienced the West as a fence-sitter to the devastating wars and conflicts in their own regions, many of them much more deadly than the war in Ukraine, the request not to stay neutral in a European war certainly rung hollow. While G7 countries have pledged to address the detrimental global consequences of the war, for some analysts, the West's initial messaging on Ukraine "has taken its tone-deafness to a whole new level." ⁵⁰

Yet as revealed in the Munich Security Index, dissatisfaction with the West in key countries in the "Global South" does not translate into a desire to see China and Russia exercise more influence over the future international order. Respondents in India, Brazil, and South Africa mostly want a greater role for developing nations when it comes to shaping international rules. But when asked to rate the attractiveness of rules made by Russia and China as opposed to rules made by the US and Europe (Figure 1.6), their choices were surprisingly clear. Alienation from the existing international order and its main guardians does not seem to equate to general support for autocratic revisionism.

Call to Order? The Defenders of the Liberal-Democratic Vision

From the perspective of the world's liberal democracies, the Russian invasion of Ukraine has been a wake-up call to defend the principles of the liberal, rules-based international order against autocratic challengers. After the end of the Cold War, they believed that the liberal vision based on the triad of human rights, liberal democracy, and market economy had triumphed and would conquer the whole globe over time. But despite its undeniable achievements, key elements of this liberal vision have lost both domestic and international support. The storming of the US Capitol on January 6, 2021, has been the most dramatic symbol of the erosion of liberal-democratic norms, which threatens not only the stability of liberal democracies, but also the liberal international order. The fact that the liberal-democratic model is increasingly contested in some Western democracies has undeniably encouraged revisionist powers to promote their alternative vision much more assertively.

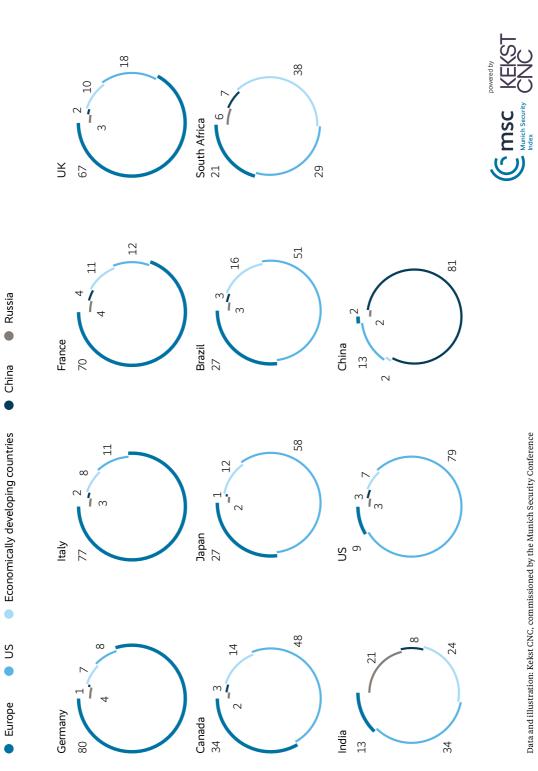
Yet the past year has – for all its horrendous developments – also demonstrated that liberal ideas can still inspire. With their extraordinary resilience and determination (Spotlight Ukraine), the Ukrainian people have galvanized international support for their country's struggle against the aggressor. In the eyes of the world, Ukraine's President Volodymyr Zelenskyy turned out



"Europe has to get out of the mindset that Europe's problems are the world's problems but the world's problems are not Europe's problems."⁴⁷

Subrahmanyam Jaishankar, Indian Foreign Minister, GLOBSEC 2022 Bratislava Forum, June 3, 2022

Citizens' views on whose rules they would prefer to live by, October-November 2022, percent Figure 1.6



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



"With unimaginable courage and determination, the Ukrainian people are putting their lives on the line for democracy – not only for their own nation but for democracy writ large for the world. [...] The Ukrainian people are making the fight for all of us. We must help them."52

Nancy Pelosi, then-Speaker of the US House of Representatives, floor speech on the Ukraine Democracy Defense Lend-Lease Act, April 28, 2022



"Today the victim is Ukraine. Tomorrow it could be any one of us [...]. The vision of a world in which only naked power wins is not only wrong and immoral but can lead to a conflagration engulfing the entire world."54

Andrzej Duda, Polish President, UN General Assembly, September 20, 2022 to be the inspiring democratic hero standing up to the autocratic villain in Moscow – "a metaphor-in-miniature for the worldwide, slow-motion wrestle between the forces of democracy and autocracy."⁵³

Russia's aggression and Ukraine's response have also instilled a new sense of purpose into democratic alliances such as the G7, NATO, and the EU, overcoming feelings of "Westlessness" and "helplessness" that had worried observers in previous years.55 Speaking in Warsaw in March 2022, US President Joseph Biden summarized a widely shared perception: "Russia has managed to cause something I'm sure [Putin] never intended: the democracies of the world are revitalized with purpose and unity found in months that we'd once taken years to accomplish."56 Against this backdrop, German Foreign Minister Annalena Baerbock spoke of a "transatlantic moment" - a sentiment shared at many MSC events during the past year that led to the "Transatlantic To-Do List."57 But as this renewed sense of purpose extends beyond the transatlantic area, the war on Ukraine has strengthened the idea of valuesbased cooperation between liberal democracies on a global scale. Some again refer to the "free world" or the "Global West," made up of "rich liberal democracies with strong security ties to the US" and "defined more by ideas than actual geography."58 While a significant majority of governments around the world have condemned Russia's war in Ukraine, it is this group of like-minded democracies that has helped Ukraine persevere – politically, economically, and militarily.

Contravening Russia's imperial fantasies, EU leaders have made clear that they envision a European future for Ukraine, Moldova, and Georgia, and have granted the former two the status of candidate countries. ⁵⁹ In addition, the EU has imposed a series of unprecedented sanctions on Moscow, financed arms supplies for Ukraine, and launched a training mission for the Ukrainian armed forces. While NATO allies have made clear that they will not engage their own forces, to avoid a broader NATO–Russia war, they have upped their individual and collective support. Although critics believe that they should do more, the degree of Western support is unprecedented, and has certainly exceeded expectations in Moscow.

Since they see Russia's war as a broader assault on the European order and the international rule of law, people in the West have not only changed their views on Ukraine, but also reevaluated their security environment in general. As new data from the Munich Security Index shows, differences in views on Russia, which were considerable before the invasion, have sharply

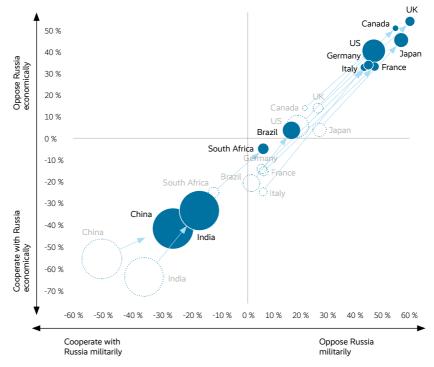
Figure 1.7

Citizens' preferences for their country's response to Russia, share saying that their country should oppose Russia minus share saying that their country should cooperate with Russia, October–November 2022, percent

What do you think your country should do in response to Russia as a military and economic power?

Size of circle = size of population





Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



declined or even disappeared. While respondents in all G7 countries are now more willing to oppose Russia economically and militarily, the shifts in France, Germany, and Italy have been the most dramatic (Figure 1.7). It seems as if Russia's blunt war of aggression has finally driven home the message that revisionists must be confronted – even in those societies that had long ignored the writing on the wall.⁶¹

At its 2022 Madrid Summit, NATO issued its new Strategic Concept, which refers to Russia as "the most significant and direct threat to Allies' security and to peace and stability in the Euro-Atlantic area."62 NATO members also announced more forward-deployed combat formations and pre-positioned equipment on the Eastern flank, and the aim to increase high-readiness forces from 40,000 to 300,000 troops. As NATO Secretary General Jens Stoltenberg noted, "this constitutes the biggest overhaul of our collective deterrence and defense since the Cold War."63 On a national level, many governments have reexamined their respective strategic postures. Sweden and Finland decided to abandon their traditional non-aligned policy and have applied to join NATO. Countries such as Poland, which have long warned about Russian revisionism, are doubling down on defense investments and buying more heavy equipment.64 Germany, where Zeitenwende was chosen as the "word of the year," has decided to raise defense spending, make many overdue investments, and discard some of its traditional foreign policy beliefs that turned out to be outdated. 65 While Berlin is working on a new national security strategy, Japan - another influential power often accused of punching below its weight - has already published a new one. Tokyo not only announced that it would double its defense spending, aiming to reach two percent of its GDP by 2027, but also embraced a controversial "counterstrike capability" to hit back against a potential aggressor.66 All these developments are bad news for autocratic revisionists, who had banked on the passivity and indecisiveness of liberal democratic governments.

Russia's war on Ukraine has also served as a catalyst for rethinking the Western approach to China, which had already begun to shift in recent years. ⁶⁷ In the long run, Beijing is clearly seen as a far more powerful and ambitious revisionist challenger to the international order than Moscow, and public opinion on China has changed considerably. Yet concern among the G7 countries is less pronounced, and views on how to deal with China are far less coherent than with respect to Russia (Figure 1.8). Whereas some fear that a China policy that is too confrontational will render a new Cold War almost inevitable, others worry that the world's democracies are not heeding the lessons learned from Russia's war, risking another, potentially more dramatic, policy failure. ⁶⁸

While the world's liberal democracies are slowly awakening to the challenges posed by autocratic revisionists and have taken the first important steps to



"These are tough times for many. But the price we pay as NATO Allies is measured in money. While the Ukrainians, they pay a price which is measured in blood. And if we allow Putin to win, all of us will have to pay a much higher price. Authoritarian regimes around the world will learn that they can get what they want with brute force."

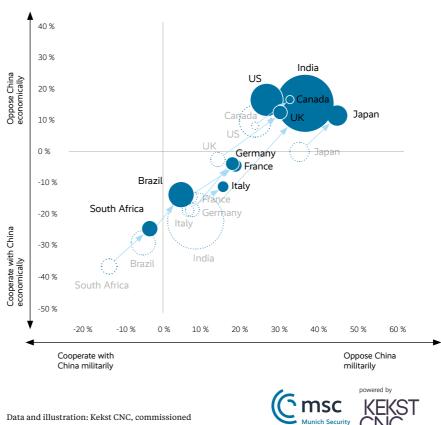
Jens Stoltenberg, NATO Secretary General, 68th Annual Session of the NATO Parliamentary Assembly, November 21, 2022

Figure 1.8

Citizens' preferences for their country's response to the rise of China, share saying that their country should oppose China minus share saying that their country should cooperate with China, October-November 2022, percent

What do you think your country should do in response to the rise of China as a military and economic power?

- Size of circle = size of population
- Survey values from November 2021



by the Munich Security Conference

pushing back against these states' subversive efforts, the much bigger task still lies ahead: swiftly conceiving a positive vision for a desirable international order and developing a compelling strategy for it to succeed in the ongoing contest for the order.



"We are at a crossroads. We are in for probably the most dangerous, unpredictable and at the same time most important decade since the end of World War II." 70

Vladimir Putin, Russian President, Valdai Discussion Club, October 27, 2022



"We are living through a watershed era. And that means that the world afterwards will no longer be the same as the world before. The issue at the heart of this is whether power is allowed to prevail over the law. Whether we permit Putin to turn back the clock to the nineteenth century and the age of the great powers. Or whether we have it in us to keep warmongers like Putin in check."71

Olaf Scholz, German Chancellor, German Bundestag, February 27, 2022

Global Divisions: Framing the Debate

One of the few things that world leaders can agree on is that the world is entering what the new US National Security Strategy calls a "decisive decade" for the future shape of the international order. Notions such as *Zeitenwende*, "historical crossroads," or "inflection point" are omnipresent.⁶⁹ While material power will matter, this struggle is also, and perhaps foremost, about competing visions.

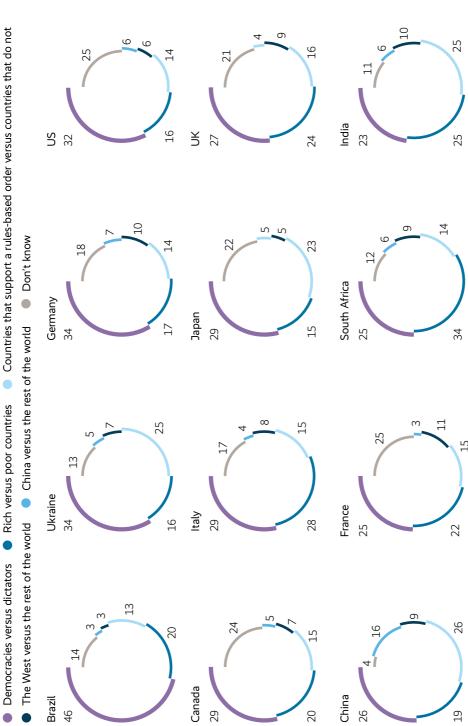
Leaders have tried to frame this contest for the international order using different dichotomies: democracies versus autocracies, rich versus poor, West versus the rest, or those that support the rules-based order versus those that do not. As data from the Munich Security Index shows, these framings resonate to different degrees, but none dominates the perceptions of the respondents in the 12 countries polled (Figure 1.9). As the chapters in this report show in more detail, there remain different cleavages, depending on the topic.

Still, looking at the big picture, the systemic competition between liberaldemocratic and autocratic visions and their respective proponents has become increasingly central to the contest for the international order. While the revisionists have tried to describe the ongoing struggle as a competition between the West and the rest, even respondents in China, Brazil, India, and South Africa do not see this as a major geopolitical fault line today (Figure 1.9). Instead, many democratic leaders have described the current struggle as a competition between democracies and autocracies.⁷² This framing captures a significant part of the ongoing contest and resonates comparatively well, with between a quarter and a third of the respondents seeing it as the dominant fault line in global politics today. Indeed, it is hard to deny that the most worrisome attacks against the post-1945 order come from "powers that layer authoritarian governance with a revisionist foreign policy," as the US National Security Strategy puts it.73 Conversely, democracies remain the key supporters of the liberal, rules-based order. As UN voting data shows, there is a clear link between regime type and voting patterns regarding key international norms (Figure 1.10). And without the support of the liberal democracies of the world, Ukraine would not have been able to withstand Russian aggression.

However, the relevance of the regime-type fault line clearly varies across policy fields, as the chapters in this report demonstrate. Issues such as human rights (Chapter 2) or the governance of global infrastructures (Chapter 3) and development (Chapter 4), which are intimately tied to the liberal core of the rules-based order, are much more prone to provoking

Figure 1.9

Citizens' views on the main fault line in global politics, October-November 2022, percent



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

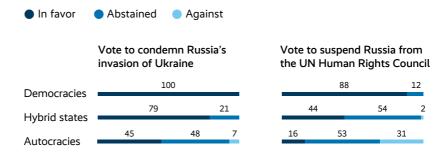
Munich Security Index



"Some would have us believe that there is the West on one side that will defend outmoded values to serve its interests and on the other side, the rest of the world that has suffered so much and seeks to cooperate by supporting the war or by looking the other way. I object to this division [...]."

Emmanuel Macron, French President, UN General Assembly, September 20, 2022 splits between a democratic and an autocratic vision of order (Figure 1.10). But thinking only in terms of democracies versus autocracies risks brushing over the fact that the contest between authoritarian and democratic visions "is being waged within states as much as between them." Most importantly, however, it risks missing other relevant dynamics in the global order contest and hampering global collective action in important respects. On trade (Chapter 3), energy (Chapter 5), or nuclear weapons (Chapter 6), for example, the constellation of state interests is more complex. Moreover, to solve many of the world's global problems, particularly climate change and global health crises, democracies need the support of non-democratic states. Even the new US National Security Strategy, built on the democracy—autocracy dichotomy, acknowledges that while cooperation among democracies is key, the United States will "work with any country that supports a rules-based order."

Figure 1.10
Recent votes in the UN General Assembly, by regime type, percent



Data: David L. Sloss and Laura A. Dickinson. Illustration: Munich Security Conference

Some have thus argued that the real division runs "between those who adhere to a rules-based international order and those who adhere to no law at all but the law of the strongest." States that might not like the liberal thrust of many international rules still have a strong interest in preserving an order where countries generally feel bound by international law. In other words, "countries do not have to be democracies to join forces in countering Russia's aggression." Singapore, for instance, is not a full-fledged liberal democracy, but is among those countries that have not only condemned Russia's aggression, but also imposed targeted sanctions as a response. The



revisionists, though, have long tried to discredit the concept of a rules-based order as a Western invention, too. For Russian Foreign Minister Sergei Lavrov, selectively applied "rules" are a Western "counterweight to the universal principles of international law enshrined in the UN Charter." Adding insult to injury, Russia, together with China, even co-founded the "Group of Friends in Defense of the Charter of the United Nations." But while it is difficult to imagine a more flagrant violation of the Charter than Russia's attempt to forcibly annex part of another country, the autocratic revisionists' attempts to question the West's commitment to the international rule of law fall on fertile ground in some parts of the world where leading Western nations have not always played by these rules.

Visions in Order

The combination of authoritarian efforts to subvert the global order and the widespread reluctance to confront this type of revisionism in many parts of the "Global South" is an urgent call to action for all those who seek to preserve an international order based on rules that apply to and are respected by all states. In fact, in all the countries surveyed for the Munich Security Index, 50 percent or more of the respondents stated that they still see a need for international rules that apply to all states equally. What is thus urgently needed is a reinvigorated vision of the liberal, rules-based international order that ensures that existing international rules and principles are attractive to a much broader global constituency. With the exception of Germany, where 63 percent of respondents agree that international politics need to be governed by universal rules and principles, agreement is stronger among the respondents from China (63 percent), India (61 percent), South Africa (61 percent), and Brazil (57 percent) than among the respondents from all the G7 countries (54 percent on average). At the same time, Chinese respondents' strong support for the idea that international politics should be based on rules that apply to all countries equally suggests that the rules respondents have in mind might not be the same in all the societies surveyed.

To be sure, the autocratic vision of the international order is not as attractive a contender as Russia and China would hope. Judging from the results of the Munich Security Index, neither Russia nor China are seen as offering an appealing vision to the world. While the respondents mostly believe that the two countries have a very or somewhat clear vision for the global order (Figure 1.11), almost no one outside of China or Russia wants to live in a world shaped mainly by the two autocracies (Figure 1.6). To paraphrase Winston Churchill, many states seem to perceive the liberal, rules-based international

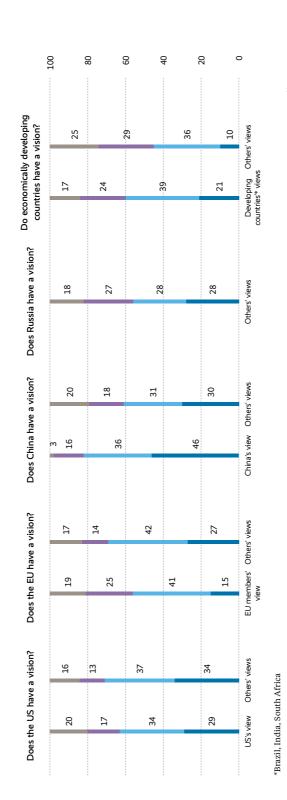
Citizens' views on whether a country or group of countries has a vision for the global order, self-perception compared to the perception of others, October-November 2022, percent Figure 1.11

Don't know

No vision

A somewhat clear vision

A very clear vision



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

Munich Security Index



"This is the time to invest in the power of democracies. This work begins with the core group of our likeminded partners: our friends in every single democratic nation on this globe. We see the world with the same eyes. And we should mobilize our collective power to shape global goods." 83

Ursula von der Leyen, President of the European Commission, 2022 State of the Union Address, September 14, 2022 order as the worst type of international order – except for all the others. Beyond autocratic revisionists, much of the dissatisfaction with the order does not seem to be inspired by a fundamental opposition toward the liberal vision per se, but rather by frustrations with its failure to live up to its ideals. For the order, this is still a liability. Without seriously reckoning with past mistakes and the comprehensive reforms that derive from this, the attractiveness of the liberal international vision is likely to continue to wane. Thus, to prevail over the autocratic vision for the international order, liberal democracies need a three-pronged strategy.

First, they need to recognize the autocratic challenge for what it is: the attempt to fundamentally transform the international order. For too long, many have underestimated this challenge and thus allowed autocratic revisionists to slowly but surely push the boundaries of the order. Russia's war against Ukraine should be a wake-up call, as it foreshadows the order that autocratic revisionists have in mind. It is a reminder of the benefits of a liberal vision based on human rights, democracy, and the rule of law – and should motivate the necessary resistance to this alternative vision.

Second, liberal democracies need to nurture a strong global community of like-minded states. Given the eroding consensus in many democracies on the liberal-internationalist policies that informed the "liberal order building"84 after World War II, building domestic support for a new "grand strategy of democratic solidarity"85 is of paramount importance. To this end, liberal democracies need to refine their own visions of a desirable order and make clear what they want to achieve – not just what they want to avoid. In contrast to China, which is very confident in its own vision for the international order, in France, Germany, and Italy, the three EU countries polled for the Munich Security Index, only 15 percent believe that the EU has a very clear vision of how it would like the international order to be run, while 25 percent believe it has no vision at all (Figure 1.11).

Third, liberal democracies need to build a larger coalition of states beyond the liberal-democratic core. While strengthening values-based cooperation among the world's liberal democracies is necessary, it is clearly not sufficient. For too long, democracies have overestimated the attractiveness of the liberal, rules-based international order. The wake-up call provided by Russia's war and the diffidence of many countries from the "Global South" has roused them from their complacency, reminding them that the international order, just like democracy itself, is in constant need of



"To stand against global politics of fear and coercion; to defend the sovereign rights of smaller nations as equal to those of larger ones; to embrace basic principles like freedom of navigation, respect for international law, and arms control — no matter what else we may disagree on, that is the common ground upon which we must stand."

"BY

Joseph Biden, US President, UN General Assembly, September 21, 2022 renewal. ⁸⁶ Given the grievances and widespread perception of exclusion among many states of the world, merely defending the status quo will not be enough. While the international order needs no revision, it is clearly in need of reform. To win the hearts and minds of "not yet aligned" governments and societies, liberal democracies need to re-envision the order as one that better represents the many countries that have hitherto been confined to the role of rule-takers, as one that better delivers on its promises, and as one that truly benefits everyone equally.

As such, this moment of crisis for the liberal international order might also be its greatest chance for renewal. If its proponents succeed in enlarging the coalition of committed stakeholders, the revisionist moment will remain just that – a moment confined to history rather than the birth of an authoritarian international order. And President Zelenskyy and the Ukrainian people will have played a big part in this achievement.

Key Points

- 1 Russia's war against Ukraine is not only a human tragedy for the Ukrainian people. It also demonstrates that even the key principles of the international order are under attack from autocratic revisionists.
- 2 Russia and China promote a version of the international order in which the interests of autocratic leaders take precedence over liberal-democratic values. Liberal democracies are slowly waking up to the challenge.
- The defenders of the liberal vision can push back effectively if they recognize the fundamental nature of the revisionist challenge and swiftly reinvigorate their own vision of a desirable international order.
- To be successful, these defenders need to do more than just nurture the global coalition of liberal democracies. They must also build a larger coalition willing to actively defend the key principles of the liberal order. This demands paying due respect to the legitimate resentment that many countries of the "Global South" have toward the existing order. Simply defending the status quo will not do the trick. They need to re-envision it.

Munich Security Index 2023

The world is becoming a riskier place. The Russian war of aggression and its ramifications have dramatically increased risk perceptions among citizens around the world. But these traditional security threats only add to, not replace, citizens' existing concerns about China or transnational risks like climate change. The Munich Security Index 2023 is thus a testament to a new age in global politics marked by an omnipresent sense of insecurity.

Since 2021, the MSC and Kekst CNC have collected data to answer core questions that help understand citizens' risk perceptions: do people think that the world is becoming a riskier place? Is there a global consensus on some of the grave risks that humanity is facing today? And how prepared do societies feel to tackle these threats? By combining five metrics, the index provides an in-depth view of how twelve countries view 32 major risks and how these perceptions change over time. This edition of the index is based on representative samples of 1,000 people from each G7 country, BRICS countries, except Russia ("BICS"), and Ukraine. The total sample thus amounts to 12,000 people. This edition is exceptional because the MSC and Kekst CNC decided not to poll in Russia and instead include Ukraine. Against the background of the war and intensifying repressions, conducting meaningful surveys in Russia is difficult and may lead to unreliable responses. Instead, the index includes a sample from Ukraine as one of the main sites where competing order visions are playing out. The polling was conducted from October 19 to November 7 using industry-leading online panels, with stratified quotas and weights to gender, age, and region to ensure representativeness. But polling in Ukraine, which took place from November 8 to 28, came with immense difficulties. Fieldwork began as Russia was intensifying its bombing of civilian infrastructure. The ensuing blackouts meant Ukrainians struggled to access the internet. Surveying by phone therefore had to complement online surveys. The result of three weeks of fieldwork is a unique snapshot of how Ukrainians feel about the war, their allies, and the future.

Overall, the Munich Security Index 2023 registers an increase in 20 risk indicators compared to the previous survey, which itself recorded significantly higher risk awareness than in the preceding year (Figure 1.13). The Russian war of aggression is the central driving force of heightened perception of risk. In all countries surveyed bar India, the risk index score for Russia rose significantly. While Russia was not seen as a top five risk in any of the G7 countries only a year ago, citizens in five G7 countries now consider Moscow

the number one risk (Figure 1.12). Differences in risk perceptions between citizens in G7 countries and others are profound, however. Notwithstanding sizeable increases in the risk index scores in Brazil, China, and South Africa, Russia ranks fairly low in four BRICS countries. China continues to be a significant concern but is considered less of a threat than Russia in all countries, including Japan and the US. The wider ramifications of Russia's war also feature prominently in citizens' risk perceptions. An economic or financial crisis is now the aggregate number one risk, likely fueled by rampant inflation worldwide, which the Russian war has contributed to. Energy supply disruption ranks a top risk in the UK and South Africa and is considered a significant risk in most other countries. Amid Putin's nuclear posturing, weapons of mass destruction have risen significantly in citizens' risk awareness, with concern highest in Ukraine, Germany, and Japan.

While differences between G7 countries and four BRICS countries on Russia's war abound, perceptions of environmental risks are widely shared. On aggregate, climate change ranks as the second highest risk, followed by destruction of natural habitats in third, and extreme weather and forest fires in fourth. In Brazil, India, and Italy, environmental risks top the ranking. Contrary to fears that Russia's war on Ukraine would distract from other pressing threats, citizens continue to be acutely aware of so-called nontraditional security concerns that particularly beset poorer countries. Only a few risks have fallen in citizens' perceptions. For instance, the risks of the coronavirus pandemic plummeted in the rankings in all countries except China – a manifestation of Beijing's failed zero-Covid policy (Figure 1.13).

Both the Russian war and the growing systemic competition also shape citizens' views of other countries. Russia, like its satellite Belarus, is overwhelmingly considered a threat except by China, India, and South Africa (Figure 1.14). Views among G7 countries have converged; Italy, which held positive views of Russia in the last index, now clearly sees Russia as a threat. China is also considered more of a threat than an ally in all G7 countries while viewed as more of an ally in South Africa and Brazil. Japanese and German citizens hold the most critical views of China. Compared to the last index, Ukraine is the biggest winner in perceptions as an ally (Figure 1.15). Poland's central role in assisting Ukraine has helped it see the second biggest improvement in views, while the US continues the trend of the past edition by further improving its reputation.



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Explaining the Index

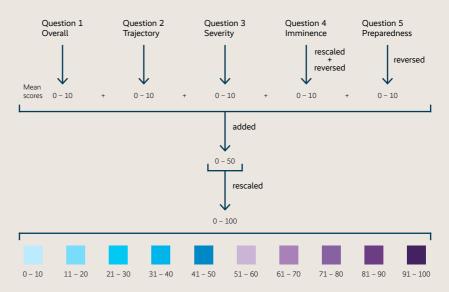
Index components

The Munich Security Index combines the crucial components that make a risk more serious. Public perceptions of trajectory are combined with imminence and severity alongside a measure to give equal weight to perceptions of preparedness.



Index scores

To produce the final risk index score for each risk in each country we add the mean scores for all five of the inputs above – overall risk, trajectory, severity, imminence, and preparedness. The resulting total is then rescaled to run from 0 to 100 for ease of interpretation. The final risk index score is an absolute figure (with 100 the highest and 0 the lowest possible risk index score) that can be compared between demographics, countries, and over time.



Besides a risk heatmap (see page 42) that features all twelve countries surveyed and how they score on each of the 32 risks covered, the Munich Security Index also includes an overview of how risk perceptions have changed since the last Munich Security Index was published (see page 43).

Country profiles

The index also provides more detailed insights into the individual risk profiles of the twelve countries surveyed (pages 44-55).

Index	score	Change in index score	Share thinking risk is imminent	Share feeling unprepared
Extreme weather and forest fires	71	+10	63	28
Climate change generally	69	+9	58	28
Destruction of natural habitats	69	+7	60	29

Change in index score

Change in the risk index score since the last Munich Security Index was published. The 2022 version of the index was based on surveys conducted in November of 2021.

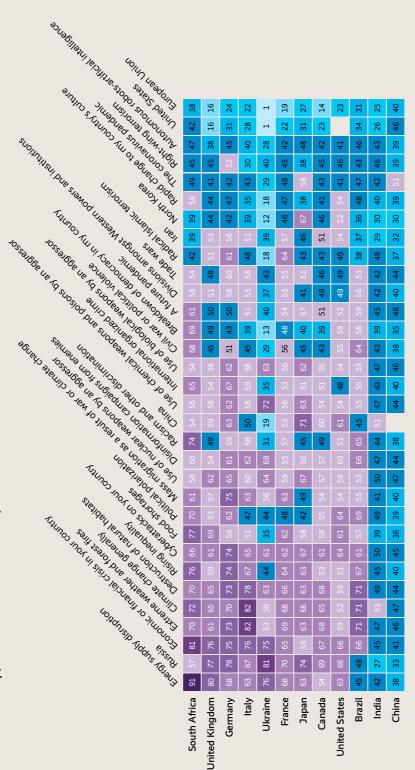
Share thinking risk is imminent

Percentage of respondents who answered "now or in the next few months," "in the next year," and "in the next 5 years" in answer to the question "For each of the following, please say how imminent a threat you think it is.

Share feeling unprepared

Percentage of respondents who rated their country's preparedness as less than 6 on a 0-10 scale in answer to the question "For each of the following, please say how prepared your country is to deal with this threat."

The risk heatmap, October-November 2022, score Figure 1.12



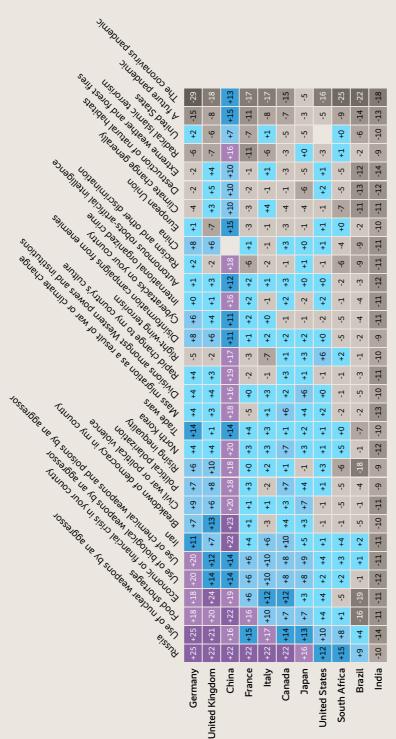
in the United States and China, citizens were not asked to assess the risk from their own country.



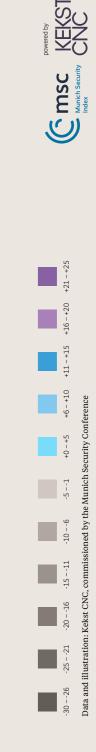




The change heatmap, October–November 2022, change in index score since November 2021 Figure 1.13



in the United States and China, citizens were not asked to assess the risk from their own country.



43

Canada

Inde	x score	Change in index score	Share thinking risk is imminent	Share feelin unprepared
Russia	69	+22	63	39
Extreme weather and forest fires	68	-3	67	28
Destruction of natural habitats	68	-1	65	27
Economic or financial crisis in your country	67	+12	66	29
Climate change generally	65	-4	62	29
Cyberattacks on your country	61	-1	65	25
China	60	+3	56	37
Food shortages	58	+7	60	29
Use of nuclear weapons by an aggressor	57	+14	47	42
Disinformation campaigns from enemies	57	+2	67	25
Use of biological weapons by an aggressor	55	+8	49	44
Political polarization	55	+7	61	24
Use of chemical weapons and poisons by an aggressor	54	+8	46	44
Mass migration as a result of war or climate change	54	+6	56	28
Energy supply disruption	54	-	58	26
Rising inequality	53	+1	62	24
A future pandemic	51	-7	54	21
Iran	51	+10	51	33
International organized crime	51	+2	56	26
Racism and other discrimination	49	-1	64	20
Divisions amongst Western powers and institutions	48	+2	48	26
Trade wars	46	+1	51	23
North Korea	46	+7	42	35
Right-wing terrorism	45	+1	52	26
The coronavirus pandemic	43	-15	64	16
Radical Islamic terrorism	43	-3	50	27
Civil war or political violence	43	+3	46	27
Autonomous robots- artificial intelligence	42	+3	45	26
Rapid change to my country's culture	41	+3	42	26
Breakdown of democracy in my country	39	+4	35	28
United States	23	-5	30	27
European Union	14	-3	2 6	22

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

Canadian respondents remain the least anxious nation among the G7 and "BICS."
When asked how safe the world is, only 41 percent said that they felt it is unsafe – compared to 46 percent of US respondents and 58 percent of German respondents.

Despite a significant increase in the risk posed by Russia – jumping up 22 points and 16 places to an index score of 69 – Canadian respondents remain relatively unperturbed. The perceived risk posed by extreme weather events and forest fires has also slightly decreased (by three points to 68), as has the risk of climate change, which is down by four points.

The perceived risk of an economic or financial crisis has significantly increased among Canadian respondents – by 12 points since
November 2021. This puts
Canada in the middle of the
G7 regarding this risk, with a smaller increase than in the
UK (+24 points) but a larger change than in France (+6 points).



is the index score increase of the risk of an economic or financial crisis.

France

Inde	Index score		Share thinking risk is imminent	Share feeling unprepared
Russia	70	+22	59	28
Extreme weather and forest fires	69	-1	62	24
Climate change generally	68	-3	59	25
Energy supply disruption	68	-	66	25
Destruction of natural habitats	66	-2	63	24
Economic of financial crisis in your country	65	+6	63	24
Radical Islamic terrorism	64	-11	65	19
Rising inequality	64	+0	62	23
Mass migration as a result of war or climate change	63	-5	57	27
Cyberattacks on your country	62	+2	59	20
Food shortages	62	+16	60	23
Use of nuclear weapons by an aggressor	59	+15	49	23
Racism and other discrimination	57	-6	62	18
Iran	57	+4	52	25
Use of biological weapons by an aggressor	56	+6	49	27
Use of chemical weapons and poisons by an aggressor	56	+6	49	26
Civil war or political violence	56	+1	49	24
Disinformation campaigns from enemies	55	+1	58	16
Trade wars	55	+4	56	19
A future pandemic	54	-11	58	19
Divisions amongst Western powers and institutions	53	+0	51	21
China	53	+1	47	29
International organized crime	53	+2	52	19
The coronavirus pandemic	48	-17	66	14
Political polarization	48	+3	52	17
Breakdown of democracy in my country	48	+1	42	28
Rapid change to my country's culture	47	-2	41	27
North Korea	46	+3	39	25
Right-wing terrorism	45	-3	52	19
Autonomous robots- artificial intelligence	42	+2	44	20
United States	22	-7	32	23
European Union	19	-3	33	20

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

In France, as in many other places, the perceived threat posed by Russia has skyrocketed – from rank 25 to number one. However, French respondents are less concerned than the rest of their European counterparts about the risks posed by nuclear, biological, and chemical weapons, as well as by cyberattacks.

French respondents' concerns about radical Islamic terrorism remain the highest of all countries surveyed, but have fallen considerably in both relative and absolute terms. In November 2021, radical Islamic terrorism was seen as the most serious risk facing France – it has now dropped to seventh place.

French respondents perceive a lower level of absolute climate risk than their German or Italian counterparts. However, in relative terms, climate change is seen as a highly pressing threat, with extreme weather events, climate change, and the destruction of natural habitats ranked as the second, third, and fifth most serious risks, respectively. Concerns about energy supply disruptions appear to have done little to diminish perceptions of climate risks.



is the decrease in rank of the perceived risk of radical Islamic terrorism.

Germany

Inde	Index score		Share thinking risk is imminent	Share feeling unprepared
Russia	78	+25	67	45
Mass migration as a result of	75	+4	70	39
war or climate change Economic or financial crisis in your country	75	+18	72	36
Cyberattacks on your country	74	+6	74	36
Rising inequality	74	+6	71	39
Extreme weather and forest fires	73	-2	71	37
Destruction of natural habitats	73	-2	68	37
Climate change generally	70	-4	64	35
Energy supply disruption	68	-	67	39
International organized crime	67	+0	72	31
Use of nuclear weapons by an aggressor	65	+25	51	54
China	63	+8	57	45
Use of biological weapons by an aggressor	62	+20	50	54
Use of chemical weapons and poisons by an aggressor	62	+20	51	53
Political polarization	62	+7	68	27
Radical islamic terrorism	61	-6	67	31
Disinformation campaigns from enemies	61	+8	69	29
Trade wars	60	+14	59	37
Racism and other discrimination	59	+2	68	27
Divisions amongst Western powers and institutions	58	+4	56	33
Food shortages	56	+18	59	34
Iran	56	+11	54	38
Right-wing terrorism	52	-5	64	25
Civil war or political violence	51	+9	53	37
A future pandemic	50	-15	62	27
Rapid change to my country's culture	47	+4	50	33
Autonomous robots- artificial intelligence	45	+1	51	31
Breakdown of democracy in my country	43	+7	36	40
The coronavirus pandemic	42	-29	67	20
North Korea	42	+4	43	37
United States	31	+2	34	34
European Union	24	+1	35	31

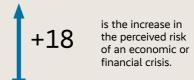
Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

German respondents are extremely concerned about the threat posed by Russia, which receives a German risk index score of 78 – higher than in any other country surveyed, bar Ukraine. The increase in the perceived Russia risk since the invasion of Ukraine has been enormous. Last year, Russia was ranked 18th out of 32 potential risks. Now it is first. Associated perceived risks, such as the use of nuclear, biological, or chemical weapons, have also increased significantly, each climbing 20 points or more on Germany's

Worries about the economy are very strong, with the risk of an economic or financial crisis having climbed 18 points to 75, and the perceived threat of energy supply disruption is also significant at 68. Rising inequality is rated as the fifth most serious risk facing the country.

risk index.

German respondents continue to show comparatively high levels of concern about climate change – extreme weather events, the destruction of natural habitats, and climate change are all among the ten most serious risks facing the country. However, the perceived severity of each of these risks has marginally decreased since November 2021.



Italy

Inde	ex score	Change in index score	Share thinking risk is imminent	Share feelin unprepared
Climate change generally	82	+4	69	36
Extreme weather and forest fires	82	+1	73	37
Destruction of natural habitats	78	-1	68	36
Economic or financial crisis in your country	76	+12	71	35
Rising inequality	67	+2	65	32
Russia	67	+22	60	42
Cyberattacks on your country	65	+0	70	26
Mass migration as a result of war or climate change	63	+1	61	35
Energy supply disruption	63	-	63	36
Disinformation campaigns from enemies	62	+2	67	27
Use of nuclear weapons by an aggressor	60	+17	48	53
International organized crime	59	-1	65	25
Use of biological weapons by an aggressor	58	+10	47	53
Use of chemical weapons and poisons by an aggressor	58	+10	47	52
Racism and other discrimination	58	-2	64	27
Trade wars	58	+3	58	30
Divisions amongst Western powers and institutions	55	+3	58	28
A future pandemic	51	-8	54	21
Food shortages	51	+10	48	34
Iran	51	+6	50	35
China	50	-1	48	39
Radical Islamic terrorism	48	-6	54	27
Political polarization	47	-2	54	22
Civil war or political violence	45	+1	43	33
The coronavirus pandemic	43	-17	65	15
Autonomous robots- artificial intelligence	40	+1	46	27
Breakdown of democracy in my country	39	-3	35	34
North Korea	39	+3	40	34
Rapid change to my country's culture	35	-1	34	33
Right-wing terrorism	30	-7	41	25
United States	28	+1	35	33
European Union	22	-1	32	27

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- Climate change is the top risk perceived by Italian respondents. In fact, the top three risks in Italy are all ecological ones, with climate change replacing extreme weather events as the top risk this year. There is a slight gender gap in the perception of climate change, with the index score for Italian women being 86, while that for men is 77. However, the risk is felt evenly across Italians of different ages, levels of education, and incomes.
- The risk of an economic or financial crisis is the fourth-ranked risk in Italy and the first nonecological risk on the list. It has moved up two places and 12 points since November 2021.
- The risk posed by Russia has risen 22 points, but with an index score of 67, it still only ranks sixth among Italian respondents. It is the second lowest among all G7 countries surveyed after the US (where it has a score of 66).

9

is the index score gap between male and female Italians when it comes to climate risks.

Japan

Inde	x score	Change in index score	Share thinking risk is imminent	Share feelir unprepared
Russia	74	+16	54	36
China	71	+0	50	33
Use of nuclear weapons by an aggressor	67	+13	39	42
Cyberattacks on your country	67	-1	59	27
North Korea	67	+3	49	33
Climate change generally	66	-4	53	25
Use of chemical weapons and poisons by an aggressor	63	+9	37	42
Extreme weather and forest fires	63	-5	52	23
Destruction of natural habitats	63	-6	50	25
Rising inequality	63	-1	53	30
Energy supply disruption	63	-	39	34
Use of biological weapons by an aggressor	62	+8	38	43
Economic or financial crisis in your country	59	+3	44	27
The coronavirus pandemic	58	-5	68	16
Food shortages	58	+7	37	32
A future pandemic	57	-3	51	21
Disinformation campaigns from enemies	56	+2	51	27
Trade wars	51	+2	41	23
International organized crime	51	-2	45	27
Mass migration as a result of war or climate change	49	+4	41	26
Autonomous robots- artificial intelligence	48	+0	44	22
Iran	46	+5	34	30
Racism and other discrimination	45	+1	44	24
Civil war or political violence	45	+7	36	27
Radical Islamic terrorism	43	+0	35	31
Political polarization	42	+4	38	25
Divisions amongst Western powers and institutions	41	+6	31	24
Breakdown of democracy in my country	40	+3	25	27
Right-wing terrorism	38	+3	31	26
Rapid change to my country's culture	38	+1	26	25
United States	31	-5	22	25
European Union	27	-1	18	26

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- Russia is now the top threat for Japanese respondents. It is up nine places and 16 points since November 2021, meaning that the top two perceived threats in Japan are other countries: apart from Russia, Japanese respondents also worry about China. Japan is the only country among the G7 or "BICS" that has more than one country among its top five risks since North Korea is fifth on the list, it actually has three.
- Among Japanese respondents, the use of nuclear weapons by an aggressor has also seen a big jump in the risk ranking up nine places since November 2021. It now constitutes the third biggest perceived risk.
- Perceptions of climate risks are down marginally for the first time in Japan by four points, with 53 percent of Japanese respondents feeling that climate change is a risk that will manifest itself within the next five years.



is how many places the use of nuclear weapons by an aggressor has moved up in the ranking of risks.

United Kingdom

Inde	x score	Change in index score	Share thinking risk is imminent	Share feeling unprepared
Energy supply disruption	80	-	78	34
Russia	77	+22	68	27
Economic or financial crisis in your country	76	+24	73	33
Food shortages	69	+20	72	32
Climate change generally	65	+3	59	25
Destruction of natural habitats	65	+5	62	25
Use of nuclear weapons by an aggressor	62	+21	54	24
Cyberattacks on your country	61	+4	67	16
Extreme weather and forest fires	61	+4	63	25
Rising inequality	59	+10	64	28
China	59	+6	57	28
Use of biological weapons by an aggressor	58	+14	53	25
Use of chemical weapons and poisons by an aggressor	58	+12	54	26
Mass migration as a result of war or climate change	57	+3	59	29
Disinformation campaigns from enemies	54	+6	65	18
International organized crime	54	+1	63	16
Political polarization	53	+8	60	21
lran	53	+7	56	23
Radical Islamic terrorism	51	-7	59	16
Division amongst Western powers and institutions	51	+4	53	21
A future pandemic	50	-8	56	18
Racism and other discrimination	49	-2	62	16
Breakdown of democracy in my country	49	+13	47	29
Trade wars	48	+1	57	20
Right-wing terrorism	45	-2	56	17
Civil war or political violence	45	+6	48	23
Rapid change to my country's culture	44	+3	46	25
North Korea	44	+4	43	22
The coronavirus pandemic	41	-18	64	14
Autonomous robots- artificial intelligence	38	+3	43	20
United States	16	-6	26	24
European Union	16	-7	28	19

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

(1

Heightened fear of multiple risks pervades the UK. Chief among them is an economic or financial crisis, which has moved up 24 points since November 2021. Concern is greatest among the oldest members of the surveyed population: the score is 88 among those aged over 65, while it is 68 among those under 35. However, perceptions of the risk posed by an economic or financial crisis do not differ much between respondents with a higher (77) and respondents with a lower income (79).

 $\binom{2}{}$

Energy supply disruption, rather than Russia itself, tops the list of risks that UK respondents think their country faces. But the UK is only second to Ukraine in terms of the perceived imminence of the Russia threat. 70 percent of UK respondents also think that this risk is likely to increase, rather than decrease, over the next few months.

(3

Food shortages are another risk that has risen a long way up the ranking in the UK since November 2021. It is up 11 places and up 20 points (from 49 to 69). It is a risk perceived more keenly by women (75) than men (62), on average.



is how much food shortages have risen in the index.

United States

Index score		Change in index score	Share thinking risk is imminent	Share feelir unprepared
Russia	66	+12	62	22
Economic or financial crisis in your country	66	+4	64	27
Cyberattacks on your country	64	-2	64	19
Political polarization	64	+1	65	23
Energy supply disruption	63	-	64	28
Food shortages	61	+4	63	27
China	61	+1	60	21
Disinformation campaigns from enemies	60	+0	65	19
Extreme weather and forest fires	59	+1	60	22
Destruction of natural habitats	59	+2	58	21
Use of nuclear weapons by an aggressor	58	+10	54	17
Breakdown of democracy in my country	58	-1	54	28
Civil war or political violence	55	-1	56	23
Use of biological weapons by an aggressor	54	+2	51	20
Use of chemical weapons and poisons by an aggressor	54	+4	52	19
Mass migration as a result of war or climate change	54	+2	56	25
Rapid change to my country's culture	54	-1	53	25
Iran	54	+1	57	17
A future pandemic	52	-5	54	19
Climate change generally	52	-1	54	22
North Korea	52	+1	53	17
Racism and other discrimination	51	-1	61	20
Rising inequality	51	+3	58	20
Radical Islamic terrorism	49	-3	55	16
Divisions amongst Western powers and institutions	49	+0	51	18
Trade wars	49	+1	56	18
International organized crime	48	+2	53	16
Right-wing terrorism	46	+6	53	18
The coronavirus pandemic	41	-16	59	14
Autonomous robots- artificial intelligence	41	+0	47	20
European Union	23	+1	36	15

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- Russia has jumped to being the top risk perceived by US respondents up 13 places in just one year. There is little polarization in US views about the risk Russia presents. Democrats give Russia an index score of 67, while Republicans see a somewhat greater risk, giving it a score of 71.
- There has been no corresponding increase in the perceived risk posed by China. It is down two places and up one point, with an overall index score of 61. There is, however, a marked partisan split just as in November 2021. The index score among Democrats is 59, and among Republicans 70.
 - Among older age groups in the US, political polarization is a risk keenly felt. US adults aged 65 or older give polarization a risk index score of 89, making it their greatest concern. Those aged 35 or younger give polarization a score of 48 and do not see it as one of their top five concerns.



Ukraine

Inde:	score	Share thinking risk is imminent	Share feeling unprepared
Russia	81	95	6
Energy supply disruption	76	92	14
Economic or financial crisis in your country	75	86	20
Use of chemical weapons and poisons by an aggressor	72	69	37
Disinformation campaigns from enemies	68	88	8
Use of nuclear weapons by an aggressor	64	48	48
Use of biological weapons by an aggressor	63	59	41
Destruction of natural habitats	63	73	24
Cyberattacks on your country	61	85	9
Climate change generally	59	67	29
Mass migration as a result of war or climate change	56	84	19
Extreme weather and forest fires	53	77	20
Political polarization	44	76	13
Rising inequality	44	68	18
Trade wars	43	68	15
A future pandemic	40	65	28
Right-wing terrorism	40	56	16
Iran	39	69	11
Divisions amongst Western powers and institutions	37	68	20
International organized crime	35	62	17
Food shortages	35	57	12
Racism and other discrimination	31	60	15
The coronavirus pandemic	29	76	12
Civil war or political violence	29	51	15
Autonomous robots- artificial intelligence	28	55	21
China	19	43	30
Radical Islamic terrorism	18	43	17
Rapid change to my country's culture	18	51	15
Breakdown of democracy in my country	13	34	16
North Korea	12	40	24
United States	1	12	47
European Union	1	10	43

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



Other than Russia itself, the top risk Ukrainians perceive is energy supply disruption. What is remarkable is that a people whose energy grid is under almost daily kinetic attack is not the country with the highest risk index score for energy supply disruptions - it only ranks third. People in South Africa and the UK are more worried about this risk. The reason Ukrainians are relatively less worried is that they feel prepared for what is happening and many believe that the worst is already behind them. Only 45 percent of Ukrainian respondents believe that the problem of energy supply disruption is likely to get worse in the next 12 months compared to 72 percent in South Africa and 70 percent in the UK. Only 14 percent of Ukrainians feel that their country is unprepared for energy supply disruptions - compared to 47 percent in South Africa and 34 percent in the UK.



Of the nuclear, biological, and chemical risks faced by Ukraine, it is the threat of chemical weapons that is perceived as the most pressing. The risk of chemical weapons has a risk index score of 72 – compared to 64 for nuclear weapons and 63 for biological weapons.



of Ukrainians say they feel unprepared for energy supply disruptions.

Brazil

Index score		Change in index score	Share thinking risk is imminen	Share feeling unprepared
Climate change generally	71	-11	66	33
Extreme weather and forest fires	71	-12	66	34
Destruction of natural habitats	71	-13	64	34
Political polarization	69	-4	68	29
Rising inequality	67	-18	63	34
Disinformation campaigns from enemies	66	-2	63	32
Economic or financial crisis in your country	66	-19	62	35
Racism and other discrimination	65	-9	67	28
Civil war or political violence	64	-1	60	34
Cyberattacks in your country	61	-4	57	35
A future pandemic	59	-14	54	30
Breakdown of democracy in my country	58	-5	51	34
Food shortages	57	-16	51	35
Divisions amongst Western powers and institutions	56	-5	55	27
Mass migration as a result of war or climate change	55	-2	57	27
International organized crime		-4	52	38
Use of nuclear weapons by an aggressor	53	+4	44	52
Use of biological weapons by an aggressor	53	-1	43	52
Use of chemical weapons and poisons by an aggressor	53	+1	43	51
Trade wars	53	-7	56	29
Rapid change to my country's culture	48	-3	49	30
Russia	48	+9	45	42
The coronavirus pandemic	47	-22	56	25
Autonomous robots- artificial intelligence	46	-3	49	35
China	45	-9	41	39
Energy supply disruption	45	-	44	34
Right-wing terrorism	43	-1	46	37
Radical Islamic terrorism	38	-2	39	43
Iran	37	+2	36	37
North Korea	36	-1	35	38
United States	34	-6	37	36
European Union	31	-2	36	34

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- The risk perception by Brazilian respondents is down almost across the board, with only the perceived risk of Russia and Iran and the use of nuclear or chemical weapons having increased since November 2021. Particularly notable are the 19, 18, and 16-point decreases seen for the risk of an economic or financial crisis, rising inequality, and food shortages, respectively. Each of these decreases bucks international trends of increased perceived risks.
- Ecological risks now make up the three greatest perceived threats facing Brazil. While concern about each of these risks has decreased in the past 12 months, it remains high in global comparison.
- While having moderately increased, Brazilian respondents' perception of the risks posed by both Russia and energy supply disruptions remains very low compared to other countries surveyed. Ranking 22nd and 26th, respectively, out of 32 potential threats, risk perceptions are lower only in India and China. Younger people are the most concerned, with 18- to 24-year-olds rating the Russian risk at 55, and respondents older than 65 rating it at 43.

is the index score decrease in the perceived threat posed by rising inequality.

China

ov ccoro			
ex score	Change in index score	Share thinking risk is imminent	Share feeling unprepared
51	+13	59	4
48	+15	58	5
47	+16	43	4
47	+10	48	3
46	+14	40	5
46	+10	45	4
46	+7	46	9
45	+11	50	4
44	+14	39	5
44	+11	48	4
44	+10	45	4
44	+14	46	3
41	+19	40	5
40	+18	39	6
40	+16	41	5
40	+18	41	6
40	+15	41	9
40	+16	42	5
39	+17	41	6
39	+12	44	5
39	+18	40	7
39	+19	38	6
38	+18	39	5
38	+20	37	7
38	-	33	4
37	+16	39	7
36	+22	35	6
35	+23	33	8
33	+22	35	11
32	+22	34	10
30	+20	32	11
	48 47 46 46 46 45 44 44 44 41 40 40 40 40 40 39 39 39 39 39 39 39 39 39 39 39 39 39	index score 51 +13 48 +15 47 +16 47 +10 46 +14 46 +10 46 +7 45 +11 44 +14 44 +11 44 +11 44 +19 40 +18 40 +16 40 +18 40 +16 39 +17 39 +12 39 +18 39 +19 38 +18 38 +20 38 - 37 +16 36 +22 35 +23 33 +22 32 +22	index score risk is imminent 51

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

The coronavirus and a future pandemic are the top two risks perceived by Chinese respondents. With a risk index score increase of 13 points, Chinese respondents' concern about the coronavirus pandemic is completely bucking the global trend of an overall decline in risk perception. The perceived risk of a future pandemic is up by five places, with lower-income Chinese respondents being the most concerned (56) and higher-income Chinese respondents the least concerned (46).

While overall, China's index scores remain below the global average, the pattern this year is one of increasing worries among Chinese respondents. All five of the top perceived risks have increased by 10 points or more.

The perceived risk posed by the US has increased by seven points since November 2021, but it is worth noting that it is still only the seventh-ranked risk among Chinese respondents – climate change, biological weapons, and extreme weather events produce much more concern among those surveyed.

+13

is the index score rise in the perceived risk of the coronavirus pandemic.

India

Index	score	Change in index score	Share thinking risk is imminent	Share feelir
Climate change generally	53	-11	53	unprepared
China	51	-11	49	10
Use of nuclear weapons	50	-14	55	11
by an aggressor	50	-14	52	11
Cyberattacks on your country				
Destruction of natural habitats	49	-12	49	14
Political polarization	49	-9	52	14
Radical Islamic terrorism Use of biological weapons	48	-9	50	13
by an aggressor	47	-12	50	13
Use of chemical weapons and poisons by an aggressor	47	-11	47	15
Disinformation campaigns from enemies	47	-9	49	11
Extreme weather and forest fires	47	-14	48	11
Right-wing terrorism	46	-10	50	12
A future pandemic	45	-13	46	13
Rising inequality	45	-9	47	14
Economic or financial crisis in your country	45	-11	48	12
Racism and other discrimination	44	-11	49	13
Autonomous robots- artificial intelligence	43	-12	49	12
Civil war or political violence	43	-11	49	11
International organized crime	43	-11	46	9
The coronavirus pandemic	42	-18	52	10
Divisions amongst Western powers and institutions	42	-10	48	11
Trade wars	42	-10	45	13
Energy supply disruption	42	-	45	11
Mass migration as a result of war or climate change	41	-13	42	14
Rapid change to my country's culture	40	-11	42	12
Breakdown of democracy in my country	39	-10	40	16
Food shortages	39	-11	43	12
North Korea	30	-12	35	11
Iran	29	-11	33	13
Russia	27	-10	36	13
United States	26	-10	32	11
European Union	25	-10	32	13

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- Climate change has moved to the top of the risk list in India, up one place since November 2021. It is a risk that is most pronounced among higherincome Indian respondents, with an index score of 61, compared to only 47 among lower-income respondents.
- The risk that China poses has moved up to second place, with 49 percent of Indian respondents feeling that the threat posed by China is imminent and likely to manifest itself in the next five years.
 - The use of nuclear weapons by an aggressor is down to third place in the ranking of risks among the Indians surveyed. Cyberattacks are ranked fourth. The largest fall in index scores is recorded for the coronavirus pandemic, which is down 13 places and now ranked as the 20th most worrying risk for Indian respondents.

-13

is the decrease in rank of the perceived risk of the coronavirus pandemic.

South Africa

Index score		Change in	Share thinking	Share feeling
Energy supply disruption	91	index score	risk is imminent	unprepared 47
Economic or financial crisis	81	_		
in your country		-5	69	38
Food shortages	77	+1	68	37
Rising inequality	76	-6	68	36
Racism and other discrimination	74	-6	69	29
Climate change generally	72	-7	66	31
Extreme weather and forest fires	70	-5	67	30
Destruction of natural habitats	70	-5	64	29
Political polarization	70	-5	65	30
Breakdown of democracy in my country	69	-1	59	35
Civil war or political violence	68	-5	60	36
Cyberattacks on your country	66	-5	62	30
International organized crime	65	-1	59	35
A future pandemic	61	-9	58	26
Mass migration as a result of war or climate change	61	-2	53	37
Disinformation campaigns from enemies	60	-5	59	29
Rapid change to my country's culture	59	-1	54	31
Divisions amongst Western powers and institutions	58	-1	50	34
Russia	57	+15	47	46
Use of nuclear weapons by an aggressor	56	+8	45	49
Use of chemical weapons by an aggressor	56	+3	41	48
Use of biological weapons by an aggressor	54	+2	41	48
Trade wars	54	+0	51	33
China	54	-4	47	43
The coronavirus pandemic	49	-25	64	19
Autonomous robots- artificial intelligence	47	-2	45	35
Right-wing terrorism	45	+2	43	34
Radical Islamic terrorism	42	+1	41	38
United States	42	+0	39	40
Iran	39	+4	40	41
North Korea	39	+5	35	43
European Union	38	+0	36	39

Data and illustration: Kekst CNC, commissioned by the Munich Security Conference

- Among South African respondents, energy supply disruptions receive the highest index score of any risk in any G7 or "BICS" country surveyed. This is due to 83 percent of South Africans saying that the consequences would be very severe, and 47 percent saying that they feel unprepared for it. 72 percent of South African respondents think that energy supply disruptions will get worse rather than better over the next vear.
- South African respondents are overall the most likely to be concerned about food shortages, with 66 percent feeling that it is a significant risk overall. This does not, however, mark a change from last year. South Africa's index score for food shortages is up by one point to 77, and 8 points away from that of any other country surveyed.
- South Africa also has the highest index score among all the countries surveyed for the perceived risk of an economic or financial crisis. The risk of an economic or financial crisis was already the top risk among South African respondents in November 2021. In the past year, the G7 and "BICS" countries have been playing catch-up with South Africa.



of South African respondents say that they are unprepared for energy supply disruptions.

Figure 1.14

Citizens' perceptions of other countries, share saying country is an ally minus share saying country is a threat, October-November 2022, percent

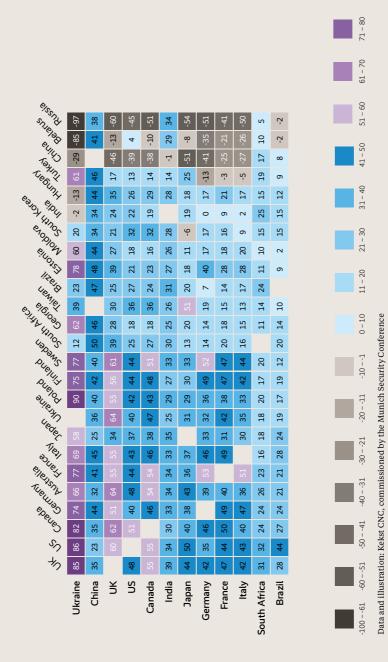
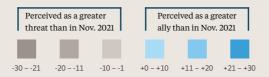




Figure 1.15
Perceptions of other countries as threats or allies, change between November 2021 and October–November 2022, group average

Global perception		Perception am G7 coun	_	Perception among "BICS" countries		
Ukraine	+22	Ukraine	+29	Ukraine	+10	
Poland	+11	Poland	+12	Estonia	+10	
Estonia	+8	UK	+8	US	+9	
US	+7	Estonia	+7	Poland	+9	
UK	+7	Australia	+7	Turkey	+7	
Turkey	+7	Turkey	+7	South Africa	+7	
Australia	+6	US	+6	Hungary	+7	
Finland	+6	Taiwan	+6	China	+6	
Japan	+5	Finland	+6	UK	+6	
Germany	+5	Germany	+5	South Korea	+6	
South Korea	+5	Japan	+5	Finland	+6	
Italy	+5	Italy	+5	Japan	+6	
Taiwan	+5	South Korea	+5	Australia	+5	
Canada	+4	Canada	+5	France	+5	
Hungary	+4	Hungary	+3	Belarus	+5	
Brazil	+2	Brazil	+1	Germany	+5	
South Africa	+2	South Africa	+0	Italy	+5	
India	+0	India	-4	Canada	+4	
Belarus	-4	Belarus	-9	Brazil	+4	
China	-6	China	-12	Taiwan	+1	
Russia	-20	Russia	-30	Russia	-3	



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



Spotlight Ukraine

The results of running the Munich Security Index in Ukraine are evidence of Ukrainian unity, resilience, and bullishness in face of Russian aggression. Astonishingly, only six percent of Ukrainians feel unprepared to take on Russia's invasion, and even during a winter marked by blackouts and shortages they feel more prepared to face the risk of energy supply disruption than any G7 public. Ukraine's Western orientation is also unequivocal. The vast majority of Ukrainians want to live in a world shaped by European and, to a lesser extent, US rules (Figure 1.16). Russian and Chinese visions of order have virtually no purchase in Ukraine.

In striking contrast to some Western policy-makers, whose concerns about further military escalation appear to hamstring more determined support, Ukrainians have not been intimidated by Russian threats. As devastating as the use of a tactical nuclear weapon against a city or on the battlefield would be, an overwhelming majority of Ukrainians say they would still refuse to surrender if it occurred (Figure 1.17). Moreover, nothing short of a complete Russian withdrawal from Ukrainian territory, including Crimea, suffices for most Ukrainians as acceptable conditions for a ceasefire (Figure 1.18). Even a Russian withdrawal from previously occupied areas would be unacceptable for the majority of Ukrainians if it does not also include Crimea. Premature peace negotiations, calls for which are particularly vocal in some Western capitals, would thus likely meet fierce resistance among the Ukrainian population.

The transatlantic partners also need to start planning for how to ensure Ukraine's long-term security from Russian attacks. Ukrainian citizens are deeply aware of the lasting threat Putin's Russia poses and overwhelmingly believe that they require Western security guarantees (Figure 1.19). What these could look like is still unclear. But most Ukrainians believe that they will need permanent arms supplies from the West. A clear majority also fears that outside of NATO, Ukraine will never be secure, which is corroborated by the fact that Ukrainians place much less faith in the EU to protect them than in NATO.

These patterns are also reflected in Ukrainians' evaluation of other countries' responses to the war (Figure 1.20). Those polled judge all G7 countries, as well as Turkey, unequivocally positively. But there are meaningful differences among them – unsurprising given the variation in material support provided,

messaging, and urgency with which countries responded to the war. The UK tops the ranking, closely followed by the US, and Canada, while Western European states trail the Anglophone countries by around 30 percentage points. Meanwhile, Ukrainians perceive China and India to have responded particularly badly, but all actors from the "Global South" score negatively in the ranking.

Figure 1.16
Ukrainian citizens' views on whose rules they would prefer to live by, November 2022, percent

Would you rather live in a world with international rules shaped mostly by...?

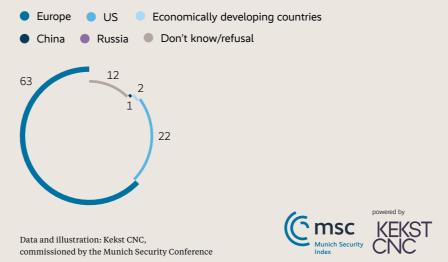


Figure 1.17
Ukrainians evaluating whether they should carry on fighting or surrender in different scenarios, November 2022, percent

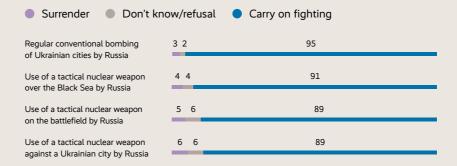


Figure 1.18
Ukrainian citizens' views on acceptable ceasefire terms,
November 2022, percent



Figure 1.19
Ukrainian citizens' views on security arrangements after the war,
November 2022, percent

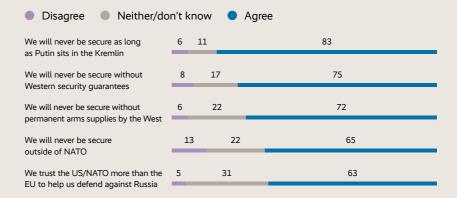
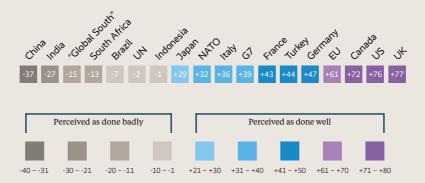


Figure 1.20

Ukrainian evaluation of the response to Russia's invasion of Ukraine of different countries and organizations, share saying the country or organization has "done well" minus share saying it has "done badly," November 2022, percent



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference





Human Rights

(2 Universell-Out

What does authoritarian revisionism of human rights look like? Why are the United States, Europe, and other liberal democracies not better at pushing back? And why are democratic countries from different regions of the world less aligned on human rights decisions than one would expect?

Universell-Out

Sophie Eisentraut

More than seven decades ago, the international community of states, albeit much smaller at that time, defined a set of fundamental human rights to be considered universal, inalienable, and indivisible. In line with the duty to uphold and defend these core rights and freedoms, its members enshrined these values in a landmark document: the Universal Declaration of Human Rights (UDHR). Although the group of drafters included people from all regions of the world and from highly diverse cultural, political, and religious backgrounds, it managed to spell out "a common standard of achievements for all peoples and all nations" that it believed would help achieve lasting peace and security and prevent the atrocities of the Second World War from ever happening again. The UDHR was adopted in the UN General Assembly with no dissenting votes, and later inspired a plethora of other global and regional human rights norms and treaties, including the African Charter on Human and Peoples' Rights and the Charter of Fundamental Rights of the European Union.

European Union.

The UDHR

**The

About 70 years later, the very understanding of human rights as universal aspirations can no longer be taken for granted. In 2022, Freedom House, whose indicators are largely derived from the UDHR, registered the 16th consecutive year of deterioration of political rights and civil liberties around the world.5 And its dire findings are shared by other human rights measures and by many experts in the field.6 At the same time, the "age of impunity," as former UK Foreign Secretary David Miliband has called it, has squarely arrived (Figure 2.1). Even for the most egregious human rights abuses, it often seems impossible to hold perpetrators to account. The war zones of the world are a drastic case in point. Rather than respecting the rights of civilians, combatants in many parts of the world are killing, torturing, or deporting civilians, deliberately targeting civilian infrastructure, and willfully undermining humanitarian aid.7 Russia's war against the civilian population in Ukraine is not just condoned – it is an actual part of the strategy. The "brutal standard of warfare" it reflects is unfortunately also found in many other places in the world.8

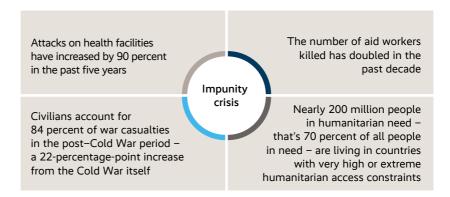
While international human rights are under assault, their universality has also become contested. Powerful autocrats are now depicting the UDHR as "an unrepresentative Western document," while their efforts to establish an authoritarian variant of international law – one meant to shield governments that violate fundamental rights and freedoms – are already in full swing. 10



"It's a mistake to think of human rights as a nice little side issue that we'll get to when we have time. If you look at the big issues of the world [...], [s]ecurity threats tend to emanate from unaccountable dictators who are serving themselves, not what their people want."4

Kenneth Roth, then-Executive Director of Human Rights Watch, Munich Security Conference, February 19, 2022

Figure 2.1
The growing impunity crisis, various indicators



Data: International Rescue Committee. Illustration: Munich Security Conference





"Russia is waging a genocidal war in Ukraine, shocking the world with the magnitude of its war crimes. It is targeting civilians, destroying civilian infrastructure, and using mass killings, torture, and rape as weapons of war. This is not an accident but rather a feature of the Russian way of war." 13

Kaja Kallas, Estonian Prime Minister, Foreign Affairs Magazine, December 8, 2022 But disagreement on human rights norms and mechanisms is also evident inside and among the democratic states of the world. With systemic rivalry set to widen rather than narrow these divides, efforts to revive the spirit of universality that originally inspired the human rights project are facing serious headwinds.

China's Human Rights Revisionism: Rights Make Might

China, supported by Russia, is at the forefront of authoritarian pushback against international human rights norms and the mechanisms built to protect them. Both Beijing and Moscow have long viewed efforts to promote human rights by the US and its European allies as an existential threat to their regimes' security and stability. Recently, however, Beijing has replaced its defensive stance – focused on shielding its repressive regime from external criticism – with a much more assertive approach aimed at advancing an alternative vision for human rights. The vision it pursues, Western observers worry, is nothing less than a world safe for autocracy, with a much more limited role for liberal human rights and the global promotion of fundamental values.

Although a Chinese representative had served on the drafting committee of the UDHR, Beijing is now denouncing many fundamental rights and freedoms enshrined in the declaration as "Western." ¹² These "so-called



"China [...] redefine[s] the international rules of play by establishing a narrative that says that these rules are centered on [...] US power and that what had previously been a universally established consensus is now something that they can legitimately contest." 17

Emmanuel Macron, French President, Conference of Ambassadors, September 1, 2022 universal values,"¹⁴ as China refers to them, are decried as unrepresentative of the values and needs of other countries in the world, developing ones in particular.¹⁵ They are also branded as instruments of Western cultural imperialism more generally and "an excuse to keep China down" specifically.¹⁶

In line with this reasoning, Beijing, with Russia's support, has pushed alternative conceptions of human rights. While there are many facets to this undertaking (Figure 2.2), two stand out: the championing of economic, social, and cultural rights over civil and political ones, and the reorientation of international law toward an absolute defense of national sovereignty. In this spirit, China is arguing that a country's development needs may well legitimize restrictions on civil and political rights, while Russia highlights that traditional values may justify the denial of minority rights. To reassert the principle of sovereignty against external interference in the name of human rights, both countries cast the West as revisionist and themselves as defenders of the status quo. To win support for these ideas, China regularly hosts conferences such as the South-South Human Rights Forum, which engage developing and emerging countries, particularly African states.

At the same time, China and Russia have continued their efforts to erode core human rights institutions and mechanisms, chief among them the UN Human Rights Council. By cooperating with the members of the "Like-Minded Group," a coalition of mostly authoritarian countries, Beijing and Moscow have worked to curb the ability of the human rights system to independently monitor human rights situations and reprimand those who abuse fundamental freedoms. These efforts are far from new. But as China has extended its political and economic clout in the world, and thus its economic and financial leverage over other countries, its ability to mute human rights critics and win support for its own interpretation of human rights has visibly grown.21 In 2017, China sponsored its first solo resolution at the UN Human Rights Council, one that insinuates that respect for human rights is contingent on economic development - and it passed by a wide margin.²² Moreover, in a recent UN Human Rights Council vote, Western countries failed to mobilize a majority against China, even for the limited aim of discussing the situation of human rights in Xinjiang. The report that would have served as the basis for this discussion - one that suggests that the human rights violations committed against Xinjiang's Uyghur Muslims may amount to crimes against humanity - almost did not "see the light of day" due to intense Chinese pressure.23

Figure 2.2

Chinese efforts to redefine international human rights standards, selected concepts promoted by Beijing

Common values. In juxtaposition to universal values, Chinese officials advocate "common values," which suggests that human rights should be subject to cultural and regional interpretations, and that even though states might find common ground, they can largely define and implement human rights as they see fit.

Community with a shared future. In China's vision of a "community with a shared future," states should refrain from criticizing each other regarding the upholding of values and rights.

State sovereignty and non-interference. China's government routinely refers to the UN Charter to demand non-interference by other countries when they bring up human rights violations in China. In doing so, it largely negates the status of human rights as a founding principle of the UN. By placing state sovereignty above everything else, China undermines efforts to codify and expand the Responsibility to Protect.

Collective human rights. China's government characterizes collective rights, as defined and upheld by the state, as taking precedence over individual human rights. Notions of collective human rights provide the Chinese party state with a pretext for curtailing individual civil and political liberties and the rights of minorities in the name of the greater public good.

Right to development. China has long promoted the right to subsistence and development as the "foremost" human right, with notions of human rights that put a premium on individual freedoms and political rights being an afterthought.

Right to security. Security as a collective right is increasingly promoted by China as a precondition for development. Placing public and national security first helps legitimize severe restrictions on civil liberties.

Democratization of human rights norms. China regularly promotes the "democratization" of UN forums and norm setting, arguing that it seeks to make the UN more equitable and representative of developing countries. This also includes championing the equal acceptance of values and political practices that may deviate from the liberal-democratic ones embedded in UN human rights laws.

Data: Mercator Institute for China Studies. Illustration: Munich Security Conference





While they are at the forefront of human rights revisionism, China and Russia are not the only autocracies that have ramped up their pushback against this core pillar of the liberal international order. Over the past years, other authoritarian regimes have also become much more active in sponsoring human rights resolutions and thereby reshaping global norms on human rights.²⁴

The Challenge From Within: Popular Illiberals

For many years, liberal democracies, supported by civil society organizations, have tried to resolve the tension between state sovereignty and the protection of individual rights, which is inherent in international law, in favor of the latter. Guided by a vision of much stronger global human rights protection, they have sought to advance an understanding of international law whereby state sovereignty is conditional on respect for human rights. Western democracies and their partners have also sought to build and strengthen the tools needed to protect human rights and hold the world's human rights offenders accountable – at least the very worst ones. Most recently, a German court convicted a Syrian war criminal based on the principle of "universal jurisdiction." This principle allows states to prosecute serious abuses of international law even when the crimes in question were not committed on their territory and neither the victims nor the perpetrators are citizens of that state. 25

With the rise of illiberal populists, pressure on civil and political rights has grown significantly in democratic societies themselves.²⁶ Among other things, these forces have been "demonizing" religious and cultural minorities, undermining the checks and balances necessary for accountable rule, and challenging essential liberties such as freedom of speech.²⁷ In the United States, conflicts over rights are now a core element of what some have called an ongoing "culture war." 28 Last year's US Supreme Court rulings have dealt a significant blow to women's rights. In Europe, some of the most evident violations of minority rights come in the form of illegal pushback of refugees and migrants at EU country borders. In many ways, autocratic populists are adopting the same anti-universalist narrative as China, protesting the "globalist" idea that governments everywhere in the world ought to be bound by the same rules and standards.²⁹ As a result, in nations where such populist forces have managed to gain office, they have often harmed both their country's domestic human rights record and international efforts to protect human rights. Former US President Donald Trump's global human rights track record, including his affection for authoritarian strongmen, is particularly well documented.30

China and Russia have been happy to reinforce these illiberal trends. But even without China's help, growing systemic rivalry might harm the human rights project. Faced with harsh geopolitical competition from Russia and China, policy-makers in the US and Europe might become much more unwilling to forgo their "unsavory alliances" with repressive and demagogic regimes. At the same time, the growing "us versus China" narrative boosts ethno-nationalist sentiments and lends itself to exploitation by those who thrive on mongering hate. In the US, xenophobic violence against Chinese immigrants as well as hate crimes committed against Asian Americans have already increased. Thus while the efforts of liberal democracies to strengthen and protect human rights continue, they are faced with growing obstacles.

Divisions Among Democracies: Human Rights Headed South

Nothing would be a better rebuke to autocratic allegations that human rights are "Western" than concerted action by democratic countries from every region of the world. Yet democracies from within and beyond the West have not always seen eye to eye on international human rights – and in light of "hardening bloc politics over human rights," these rifts may very well grow in the future.

Over the past few decades, countries that respect human rights have often failed to vote together on human rights resolutions. Alignment between the EU and African democracies has been particularly weak (Figure 2.3). Moreover, despite having fundamentally different democratic and human rights records from one another, emerging powers from the "Global South" have often allied themselves more closely with each other than with the EU on core human rights decisions. ³⁴ Overall, many non-Western democracies have shown greater concern for sovereignty and non-interference than their Western counterparts, European states in particular. As a result, they have repeatedly proven reluctant to embrace the external promotion of liberal human rights norms and standards. ³⁵

Cultural differences may very well contribute to varying human rights approaches. Although any distinction of this sort risks being overly simplistic, some scholars distinguish "thin" societies of the West, which tend to concentrate on individual freedoms, from many "thick" societies of the "Global South" that focus on "the well-being of society as a whole." ³⁶ But scholars also highlight widespread suspicion of the West among many "Southern" states. Governments of countries that have experienced Western colonialism and imperialism might not necessarily question the legitimacy

Figure 2.3

Voting coincidence with the EU on human rights votes in the UN General Assembly, 2021–2022, percent

	Africa	Asia- Pacific	Eastern Europe	Latin America	Western Europe and others
Free	47	70	n/a	50	93
Partly free	45	41	88	50	n/a
Not free	43	41	33	34	96

Data and illustration: ECFR



of human rights norms as such, but they may still regard these values and robust actions in their name as a threat to their newfound independence.³⁷ While these sentiments are all but new, some detect a new trend of "cultural decolonization" that will likely see differences grow as societies celebrate cultural differences and push back against universalist ideas.³⁸

China certainly knows how to exploit these dynamics and sentiments in its favor. It is actively courting the "Global South," African states in particular, with the notion of "human rights suitable for developing countries," purporting that its own understanding of human rights is much more attuned to these countries' needs.⁴⁰ And together with Russia, Beijing eagerly caters to anti-Western sentiments and suspicions, pointing to overbearance and double standards in Western human rights practices and portraying the West's human rights agenda as not actually motivated by a belief in universal values, but as a desperate attempt to prevent its own decline.⁴¹

Reviving Human Rights as a Cross-Regional Project: Versatile Universality?

If these trends are allowed to continue, the future international order will have little resemblance to the one that the international community pledged to bring about seven decades ago. Efforts to push back against emboldened autocrats will not succeed if countries with good human rights records cannot restore human rights as a cross-regional project. But how can the notion of universality be revived among the democratic states of the world?



"China will [...] oppose interference in others' internal affairs and double standard[s] under the pretext of human rights issues and make relentless efforts for global human rights governance that is more equitable, reasonable, and inclusive."³⁹

Wang Wenbin, Chinese Foreign Ministry Spokesperson, press conference, February 28, 2022

How can they win the support of governments that might not necessarily be "ideologically committed to the project of authoritarian international law" but are currently acquiescing to it?⁴²

Some steps are obvious. If Western democracies want to reduce suspicions regarding their human rights policies, they cannot allow themselves to apply double standards when implementing basic human rights. It is also evident that without extensive exchange across regions, cultures, and religions, any effort to revive the old human rights consensus is bound to fail. Other steps, however, are much more controversial. By refocusing on a smaller set of core human rights – "a universal minimum standard," some suggest – this lost consensus might be reestablished. But while a narrower focus may help bridge divides that threaten the human rights project – divides that China and others exploit for that very reason – an attempt to water down the liberal human rights agenda in the service of broader global agreement also comes with obvious downsides.

While it is far from clear whether the spirit of universality can be revived, there are also reasons for hope. There is ample evidence that fundamental human rights, such as the desire to live in dignity and free from oppression, have a strong appeal far beyond the traditional West, including inside the world's most oppressive regimes. In Iran, undeterred by violent repression, people are taking to the streets to demand core rights and freedoms. Millions of people everywhere in the world are regularly "voting with their feet," leaving their own repressive countries for refuge in liberal states rather than in Russia or China. 44 And the results of the World Values Survey provide ample evidence that "the 'West' is not the sole guardian of liberal values."45 Meanwhile, in all countries surveyed for the Munich Security Index, except for China and India, more people disagree than agree that it would be a good thing if China had more say over the rules that govern international politics (Figure 3.2). Those who seek to portray universally shared human rights standards as incompatible with a more pluralist, multipolar order are currently those who speak with the loudest voice. They can still be proven wrong. But without a clear vision of how to revive the human rights project, the window to do so is closing rapidly.

Key Points

- 1 More than seven decades after the Universal Declaration of Human Rights (UDHR) was adopted, human rights are not only in a dire state in many parts of the world, but the very notion of human rights as universal aspirations has become contested.
- 2 Beijing has replaced its defensive behavior by a much more assertive approach to human rights. It is denouncing fundamental rights and freedoms enshrined in the UDHR as Western and is instead promoting an alternative vision of human rights governance.
- 3 Emboldened autocrats are not the only challenge. Promoted by right-wing nationalist movements, illiberal ideas are now deeply entrenched in democratic societies themselves. And democracies from different parts of the world often do not see eye to eye on international human rights norms and mechanisms.
- With systemic competition set to amplify rather than narrow existing divides among governments, efforts to revive the spirit of universality that originally inspired the human rights project face serious headwinds. But protests in Iran and elsewhere also suggest that among people human rights have not lost their global appeal.



Global Infrastructures

My Way or No Highway

Why have global infrastructures become main sites of geopolitical competition? Do Europe and the US share visions for key global infrastructures? Why is the global trade infrastructure eroding, and what comes next? And how are democratic and autocratic visions playing out in the race to shape physical and digital infrastructures?

My Way or No Highway

Leonard Schütte

Global infrastructures create connectivity between peoples and economies. But establishing such connections is neither a mere technical exercise, nor do these connections necessarily reduce conflict.¹ Instead, power politics is increasingly permeating global infrastructures. Whoever controls these infrastructures enjoys structural power: they can set the rules of the game in their favor and render other states dependent on them.² For example, the fact that China has so far not systematically violated the US and EU sanctions against Russia in the wake of the war on Ukraine is largely due to Beijing's fear of secondary US sanctions, given US control over the global financial architecture.³ As a result, shaping global infrastructures has become a central prize in the systemic competition.

The existing trade infrastructure was largely designed to encourage free trade, market forces, and interdependence. But emerging powers like China seek to reassert the primacy of the state over the trade infrastructure as security concerns increasingly drive economic policy. The US is also pursuing a more protectionist vision, and even the EU has had to adopt defensive economic instruments while scrambling to defend the open trade infrastructure in this geoeconomic age. Meanwhile, China's Belt and Road Initiative (BRI) has unleashed a race to construct physical infrastructure in Eurasia and Africa, and brought rival autocratic and democratic visions of governance to the fore. And major powers are competing to shape the emerging digital infrastructure that is set to shape states' prosperity and security in the decades to come. China is spearheading a group of autocratic states intent on promoting their techno-authoritarian vision for the digital age, while the transatlantic partners are only gradually converging on their vision of an open digital infrastructure.

Trading Interdependence for Autonomy

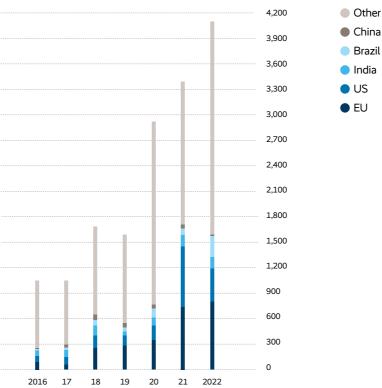
Growing geopolitical competition has upended the very logic of the international trade architecture. The post–Cold War era was one of markets and cooperative trade multilateralism embodied by the WTO.⁴ Underpinned by the dominance of the US dollar, this international trade infrastructure served to reduce trade barriers between states, curtail state interventions through limits on dumping and subsidies, globalize supply chains, and foster the movement of capital. The resulting interdependencies were considered beneficial for economic prosperity and political convergence between disparate systems.



"We will strengthen the safeguards for ensuring economic, major infrastructure, financial, cyber, data, biological, resource, nuclear, space, and maritime security. Mechanisms for countering foreign sanctions, interference, and longarm jurisdiction will be strengthened." 10

Xi Jinping, Chinese President, 20th Party Congress, October 16, 2022 Today, this vision of an open trade infrastructure has fewer and fewer supporters, even if narratives of deglobalization have no basis in data so far. Once seen as a driver of prosperity and amity between erstwhile rivals, states now primarily view interdependence both as a vulnerability and a conduit for coercion. Russia's weaponization of Europe's gas and oil dependency is a case in point. The international trade infrastructure has thus become securitized. Protectionism incompatible with open trade infrastructure is on the rise. And states are increasingly resorting to industrial policies, trade restrictions, export controls, and investment screening. Figure 3.1 illustrates these trends, though Chinese interventions tend to be underreported and likely higher in reality. We may be at the cusp of a new geoeconomic age shaped by power, states, and pursuits of autonomy rather than rules, markets, and interdependence.

Figure 3.1
Discriminatory trade interventions, per year and country



Data: Global Trade Alert. Illustration: Munich Security Conference





"America invented the semiconductor [...] and this law brings it back home. It's in our economic interest and it's in our national security interest to do so." 14

Joseph Biden, US President, signing of the CHIPS and Science Act, August 9, 2022 China's "party-state capitalism" is a primary driver of ushering in this new age. For years, China has been systematically violating WTO principles by subsidizing key industries, discriminating against foreign companies, and stealing intellectual property. These practices have distorted markets not only in the West, where economic dislocation has undermined support for globalization, but also in developing countries whose interests China purports to defend. For instance, China has become the largest subsidizer of agricultural products and cotton, at the expense of predominantly African farmers. At the same time, China rejects WTO rulebook reforms and clings to its status as a developing economy.

Even more consequentially, national security concerns have gradually replaced economic prosperity as the primary driver of Chinese trade policy. Chinese sanctions against Lithuania for forging closer relations with Taiwan, or against Australia for calling for an independent inquiry into the origins of the pandemic, exemplify that China prioritizes national security concerns over trade. The Made in China 2025 plan and the Dual Circulation Strategy are further manifestations of these security concerns, marking a definitive break with the long-standing focus on export- and investment-led growth. To become less dependent on foreign markets and technology, the new Chinese economic model aims to strengthen consumption and support domestic innovation to dominate key technologies of the 21st century, while making other countries dependent on China. In parallel, the Chinese Communist Party seeks to elevate the role of the Chinese yuan to push back against the hegemony of the US dollar.

In the US, too, trade has become a matter of national security. The country was long the guardian of the open trade infrastructure, but the Trump administration launched a trade war against China, imposed hefty sanctions upon its European partners, and rendered the WTO's dispute settlement mechanism defunct. While President Biden has suspended most tariffs against the EU, he has kept course on other issues as trade has become highly politicized in Congress; the US continues to block the WTO's dispute settlement mechanism, and pursuing free trade agreements is no longer a priority, as the 2022 National Security Strategy testifies.

The Biden administration also uses active industrial policy, paired with protectionist policies, to prevail in the great-power rivalry with China. Nowhere is this more pronounced than on semiconductors. In August 2022, US Congress passed the CHIPS and Science Act, which provides an



"We need a Buy European Act like the Americans [...]. You have China that is protecting its industry, the US that is protecting its industry, and Europe that is an open house." ¹⁶

Emmanuel Macron, French President, TV interview, October 26, 2022



The escalation of trade relations between the US and China, pursuits of greater self-sufficiency, and the weaponization of interdependence all pose a fundamental challenge to the EU's vision of an open trade infrastructure. The founding premise of the EU is that rules-based economic interdependence – embodied in the European single market – helps overcome historical enmity. The EU has therefore long been among the main supporters of the WTO and was a crucial driving force behind creating an interim dispute settlement mechanism. ¹⁷ It continues to push for wider WTO reform and pursues multilateral trade agreements around the world. And it is much more integrated into the global economy and more dependent on the Chinese market than the US is. ¹⁸

The beleaguered EU has thus been trying to walk the fine line of maintaining the open trade infrastructure while becoming more autonomous. It has grudgingly created new instruments to tackle market distortions, protect critical infrastructure, defend itself against economic coercion, and limit the reach of US dollar dominance. These instruments include a revised Trade Enforcement Regulation to unilaterally respond to breaches of trade rules by the EU's trading partners; the Instrument in Support of Trade Exchanges to circumvent secondary financial sanctions; investment screening regulations; and a dual-use export regime to restrict the export of technologies used for surveillance, for example. But some EU countries have been sending mixed signals. While German Vice-Chancellor Robert Habeck proclaimed the "awakening of German trade policy," the social-democrat-led chancellery overruled its coalition partners to sanction the sale of a 24.9 percent stake



"[W]e must accept this duality, whereby we continue to defend a multilateral order based on rules, but also accept that it is essential to do so from a stronger position, equipping ourselves with all necessary instruments." 19

Sabine Weyand, Director-General of the European Commission's Directorate-General for Trade, interview, January 31, 2022



"[F]ragmentation and decoupling of the multilateral trading system would not just be economically costly: it would leave all countries more vulnerable to the global commons problems that now represent some of the biggest threats to our lives and livelihoods."²²

Ngozi Okonjo-Iweala, Director-General of the WTO, 2022 Lowy Lecture at the Lowy Institute, November 22, 2022 in a terminal of the port of Hamburg to the China Ocean Shipping Company, owned by the Chinese state.

The open trade infrastructure has become the collateral of geopolitical tensions. Visions for global trade multilateralism hardly resonate in this age of geoeconomics. China, the US, the EU, and also India have intensified their efforts to become less integrated with the global economy. Many new trade initiatives - such as the US-initiated Indo-Pacific Economic Framework, the EU-US Trade and Technology Council (TTC), or the Regional Comprehensive Economic Partnership agreement that China joined – lack ambitions to seriously increase market access, and primarily concern geoeconomic issues like supply chain security or critical infrastructure. The securitization of trade may usher in the end of the rules-based trade infrastructure. This would have repercussions for prosperity everywhere, but particularly in the EU and countries in the "Global South," for whom (even imperfect) trade multilateralism is preferable to unregulated power politics.²³ Transatlantic partners must therefore strike a delicate balance. In light of widespread economic coercion by autocratic states, they need to enhance their resilience and diversify supply chains in sensitive sectors, without bifurcating the trade infrastructure or terminally undermining the WTO.

Building and Burning Bridges

Physical infrastructure, too, has become a site of systemic competition. Multilateral institutions, such as the World Bank, and rich countries have long provided funds for infrastructure projects. But these have been vastly insufficient to close the global infrastructure investment gap of around 15 trillion US dollars. Over the past decade, China has tried to fill this void, becoming the central infrastructure provider in the developing world. Through the BRI – a framework that encompasses a sprawling panoply of infrastructure projects such as ports, electricity grids, and train links – China's spending could amount to one trillion US dollars by 2027. However, Chinese infrastructure investment levels have markedly declined since 2016, as domestic economic woes and problems with debt unsustainability have mounted, aggravated by the pandemic. BRI, as the Chinese Communist Party's recent National Congress affirmed, is here to stay.

Chinese President Xi Jinping announced the BRI in 2013 in a quest to create greater connectivity across Eurasia and enable China to become the dominant economic power in the region. Almost 170 states and international organizations have since signed cooperation agreements. The BRI has several core aims.



"China comes forward with a basket of money, aggressive proposal, and affordable proposal. And then we have a problem. What to do?" ²⁹

A. K. Abdul Momen, Bangladeshi Foreign Minister, Munich Security Conference, February 19, 2022 The infrastructure program will create new export markets for Chinese goods and outlets for its industrial surplus capacity, while also creating access to strategic resources such as minerals and food. In addition, the BRI should help make Chinese energy supplies more resilient. China is currently dependent on shipments via the Strait of Malacca – 80 percent of Chinese oil imports run through it. Given US naval dominance, constructing land routes to the Persian Gulf should help reduce this vulnerability for China.²⁸

But the BRI is not merely an economic project. It promotes Chinese standards and institutions, reduces vulnerabilities vis-à-vis the US by reshifting trade flows, draws states into Beijing's orbit, and weaves webs of dependencies by becoming a major creditor and creating debt traps. Almost 60 percent of Chinese foreign loans are held by countries in financial distress.³⁰ Chinese investment has thus bought the Chinese Communist Party significant influence in recipient states, many of whom vote with China in UN bodies or veto EU positions.³¹ China also uses the BRI to promote its governance model. Investments are state-led, and the absence of social, environmental, or human rights conditionalities strengthens autocratic recipient governments and abets corruption. Here too, China is busy creating an alternative financial infrastructure with "Chinese characteristics" to insulate the BRI from US financial hegemony.³² The BRI therefore furthers China's vision of a multipolar world order and increases China's say over international rules, which those outside of China (and to some extent India) disapprove of (Figure 3.2).

Transatlantic partners have been slow to respond to the BRI.³³ Until recently, infrastructural efforts had largely been disjointed. This is supposed to change with new initiatives on both sides of the Atlantic. To counter China's increasingly obvious geopolitical ambitions, the EU launched its Connectivity Strategy in 2018 to deepen networks between Europe and Asia. This was followed by the more comprehensive Global Gateway Initiative, which pledged 60 billion euros annually. In a similar vein, the Biden administration launched the Build Back Better World initiative, through which it intends to allocate 40 billion US dollars every year. Finally, in 2022, the G7 aggregated these initiatives under the Partnership for Global Infrastructure and Investment (PGII) to mobilize 600 billion US dollars through to 2027.

What unites these initiatives is their claim to offer a democratic alternative to the BRI. The PGII aims to promote "transparency, good governance, environmental, and climate as well as financial and debt sustainability." But it is too early to say whether this lofty infrastructure vision will become

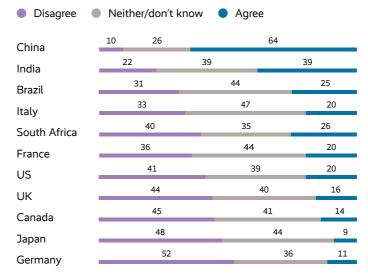


"The fate of future generations depends more than ever before on the quality and quantity of our infrastructure investment today."34

Ursula von der Leyen, President of the European Commission, European Development Days, June 21, 2022

Figure 3.2
Citizens' views on whether China having a greater say over the rules that govern international politics is a good thing, October–November 2022, percent

Do you agree or disagree that it is a good thing if China has more say over the rules that govern international politics?



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference





reality. Questions remain around where the pledged sums will come from. So far, the EU has not dispensed any new funds through the Global Gateway Initiative, which lacks ownership within the European Commission. ³⁶ The EU's and G7's loans also come with conditionalities, which many autocratic governments may be disinclined to accept. Funding processes are also more cumbersome, given the array of public and private actors involved, compared to China's "state-led one-stop shop." ³⁷ But as problems with the BRI mount and Chinese funds abate, the competition between different visions for development infrastructure is set to intensify.

Digital Divides

Competing visions of governance are also playing out in the race to shape the emerging digital infrastructure. Access to and control of data has become a central ingredient for innovation, international trade, and national security. Like with physical infrastructure, there are enormous funding gaps, especially

in the "Global South." The emerging digital infrastructure has hitherto been shaped by liberal visions. American pioneers conceived the internet as an open, free, and global agora for ideas, governed my multiple private stakeholders with a strictly limited role for the state. 39 But China, as the vanguard of autocratic powers, is pushing to revise the principles of the open digital infrastructure and dominate its physical enablers. Meanwhile, the EU aims to wrest back control from big tech companies to enhance citizens' privacy while maintaining the internet's open nature. Other powers, such as India, have also become active players in the quest to shape the digital age.

The liberal digital vision contradicts the Marxist-Leninist foundation of the Chinese Communist Party as the ultimate control organ over Chinese society. For the "biggest of big brother,"40 an open internet that allows for freedom of speech and anonymity poses a threat to domestic stability. China has therefore long insulated itself from the free flow of data by erecting a Great Firewall of technological barriers and laws. But China has recently gone on the offensive to project its vision for the digital infrastructure abroad. First, China has promoted its vision of a "clearly bounded national internet space"41 by trying to change the prevailing technical internet standards. The China Standards 2035 Strategy calls for expanding Chinese presence in bodies such as the International Telecommunication Union (ITU) and deepening standardization dialogues with BRI countries. As part of its wider effort to strategically staff UN agencies, China managed to install Houlin Zhao, who has attracted attention for his overt support for Huawei, as head of the ITU in 2014 (US national Doreen Bogdan-Martin replaced him in January 2023).

The most prominent effort to introduce new digital standards is China's 2019 proposal for a New Internet Protocol (New IP). Internet protocols enable communications across hardware devices, and are essential for the internet to function. The existing protocol embodies an open internet based on the same standards worldwide. The New IP instead promotes a centralized, controllable Chinese model, whereby each country can impose its own restrictions and potentially require individuals to register to use the internet.⁴² Such a digital vision would enhance state control and surveillance while eroding free speech and citizens' privacy. The New IP negotiations have stalled in the ITU, but China has found supporters in Iran, Russia, and Saudi Arabia. China also recently turned the World Internet Conference, which it founded and controls, into a formal organization to shift authority away from Western-dominated institutions.⁴³

Second, China is exporting its digital vision by building physical enablers abroad, especially in developing economies. As part of its Digital Silk Road (DSR), China has already invested 50 billion US dollars and is emerging as a prime provider of networks, undersea cables, surveillance systems, and satellites. Huawei alone has built 70 percent of the 4G networks in Africa, and China has become a central provider of high tech in Europe's neighborhood. Aside from reaping commercial benefits, China uses the DSR to promote its techno-authoritarian vision of governance. Huawei's Smart City and Safe City projects serve as an integrated framework through which China diffuses technologies such as facial recognition software, surveillance cameras, and big-data analysis programs to digitize public services while systematically surveilling citizens. According to the company's 2021 annual report, more than 700 cities around the globe use Huawei's smart technology. Not surprisingly, autocratic regimes are much more likely to sign Safe City contracts with Huawei than democratic ones are.

The US and EU have pushed back against Chinese efforts to impose its authoritarian vision upon the digital infrastructure, even if many EU member states still use Huawei components in their telecommunications systems. 48 Both the US and EU agree that the New IP would undermine the foundation of the open and inclusive internet. But the transatlantic partners have long not seen eye to eye on digital strategy. The EU has recognized its lack of digital sovereignty, not only because of the dearth of European tech players but also because of diverging views on privacy and monopolies.⁴⁹ The EU has pursued a "bourgeois" vision rather than the US "commercial" vision for the internet, where the European Commission assumes an active regulatory role to protect citizens' privacy, minimize hate speech, and dispel digital monopolies. 50 To these ends, the EU adopted the landmark General Data Protection Regulation to allow citizens to decide how companies use their data,51 the EU Digital Markets Act to prevent big tech companies from abusing their market positions, and the Digital Services Act that obliges providers to delete disinformation and hate speech. The European vision has created tensions with the US, whose tech companies appear to be the primary addressees of European initiatives.

But amid the wider renaissance of the transatlantic relationship under the Biden administration, the EU and US have begun building a common Euro-Atlantic digital infrastructure. ⁵³ In April 2022, they spearheaded the signing of the Declaration for the Future of the Internet by more than 60 states, which affirms the objective of preserving an "open, free, global, interoperable, reliable, and secure internet." Signatories mostly included democracies but



"[The EU and US] may not end up with the exact same laws, but it is becoming increasingly clear that we share the same basic vision when it comes to developing digital policy to protect our citizens, and to keep our markets fair and open."52

Margrethe Vestager, Vice President of the European Commission, Stefan A. Riesenfeld Symposium at the University of California, February 22, 2022

also partially free states such as Kenya and Serbia, reflecting the digital divide between democracies and autocracies (Figure 3.3). In turn, the TTC convened for the third time in December to spur transatlantic coordination on technology sanctions against Russia, infrastructure programs to compete with the DSR, and initiatives on key technologies. The two sides have also made progress on a data privacy agreement, which has traditionally been a divisive issue. ⁵⁴ Notwithstanding remaining differences on issues of privacy and big tech regulation, the transatlantic partners are gradually converging on a vision for digital infrastructure that should be open and global but subject to greater regulation.

Figure 3.3
Signatories of the Declaration for the Future of the Internet, 2022



Data: US State Department. Illustration: Munich Security Conference

In the competition between digital visions, India is playing an increasingly central role. Not only is it an emerging tech superpower, it has also been busy setting digital standards and pushing back against Chinese digital authoritarianism by banning Chinese apps, including TikTok, and Chinese telecommunications hardware. However, amid an increase in internet shutdowns by the Indian government during protests, India has yet to sign the Declaration for the Future of the Internet, highlighting continued differences with the transatlantic partners. ⁵⁵ It is still all to play for in the high-stakes game of shaping the future digital infrastructure.

Scrambling for Structural Power

Global infrastructures have become major sites of systemic competition, thus securitizing the erstwhile technical realm of connectivity. All major powers are busy protecting themselves from the risks of the open trading infrastructure by curtailing their interdependencies. A new vision for trade infrastructure to generate mutual prosperity while limiting vulnerabilities is not in sight. In contrast, democratic and autocratic camps openly compete to imbue both physical and digital infrastructures with their visions of governance. But the transatlantic partners have been slow to recognize the gravity of the challenge posed by their autocratic rivals, and they are not yet aligned on trade and digital issues. And when it comes to physical infrastructure - notwithstanding lofty announcements - they are yet to put money where their mouths are. The competition over global infrastructures highlights that trade, security, and development policy cannot be disentangled. Liberal democracies therefore need to adjust their political structures to create coherence across all relevant infrastructure policies and place much greater emphasis upon them. This will be crucial to shape the international order in the decades to come.

Key Points

- Global infrastructures have become major sites of systemic competition because they promise to yield structural power: the power to set the rules of the game and create dependencies.
- The global trade infrastructure based on the WTO's rules is eroding as China, the US, India, and even its stalwart defender, the EU, are increasingly resorting to protectionism. The old rules are dying but no new vision is in sight.
- 3 Through the Belt and Road Initiative, China has engaged in massive physical infrastructure projects in the developing world to create a Sino-centric regional order. The G7 has only recently responded by launching its own infrastructure funds.
- Democracies and autocracies are competing to shape both the physical enablers and the very principles of the emerging digital infrastructure. But the US and EU are only slowly converging on their digital vision.

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Development Cooperation

4

Strings Attached

How do increasing systemic competition and efforts to rewrite the international rules-based order affect development cooperation? To what extent does China offer an alternative model for development, and how does this play out for the provision of vaccines, food security, and climate finance? What are the consequences for the US and Europe? Can countries in the "Global South" capitalize on the increased engagement of external powers?

Strings Attached

Isabell Kump and Amadée Mudie-Mantz Development cooperation has not been spared from growing systemic competition and efforts to rewrite the international rules-based order. Health and food security as well as climate finance have become key policy fields where geopolitical dynamics and competing narratives are playing out. China, in particular, is challenging US and European approaches to development cooperation with low- and middle-income countries (LMICs). And as the current order has hardly worked in favor of those countries, China's growing engagement falls on fertile ground. Based on its own development trajectory, China aims to promote cooperation between countries in the "Global South," which, it claims, is guided by solidarity and produces mutual benefits. However, China's engagement comes with strings attached, which deepen the political and economic dependencies of their partner countries. Furthermore, the US and Europe are wary of Russia expanding its influence in other regions of the world, especially on the African continent, often sparking instability in already fragile contexts. As the competing powers are trying to strengthen their commercial and strategic ties with countries in the "Global South," there is a risk of those countries once again being drawn into greatpower competition. But it also opens up opportunities for countries in the "Global South" to push for a more equitable global system.

Development Cooperation: A Means to a Strategic End?

Development cooperation and foreign aid have always been used as tools to achieve states' foreign policy objectives. During the Cold War, the US and the Soviet Union deployed foreign aid as a means to secure the allegiance of other countries, including many newly independent African countries.² Moreover, in the aftermath of the terrorist attacks of September 11, 2001, the US used foreign aid as a means to support "friends and allies" and prevent the spread of radicalism and terrorism through the promotion of democracy and human rights.³ However, growing systemic competition as well as China's and Russia's desire to rewrite the international rules-based order have now elevated the strategic use of development cooperation to another level. It is used to secure economic opportunities, forge political alliances, and shape the rules of development.⁴

The US, Europe, China, and Russia are rallying political support and seeking economic opportunities in countries in the "Global South." The scramble for winning the battle of narratives over who is to blame for Russia's war of aggression shows that major powers increasingly recognize that countries



"South-East Asia is a key region and we want to further develop sustainable and trusted connections with ASEAN countries."5

Jutta Urpilainen, EU Commissioner for International Partnerships, EU-ASEAN Commemorative Summit, December 14, 2022



"There is the will to perpetuate systems that have not helped Africa." ¹³

Moussa Faki Mahamat, Chairperson of the African Union Commission, Munich Security Conference, February 19, 2022 in the "Global South" can become crucial "swing states." They can tip the balance between the systemic competitors and therefore shape the fate of the international rules-based order.

In the near future, countries in Southeast Asia and Africa will play a much bigger role in international trade, given their abundant natural resources, fast demographic growth, and economic dynamism. ⁷ Latin America also offers vast deposits of critical raw materials, such as the world's largest lithium reserves, which are considered essential for the energy and electric mobility transition (Chapter 5). Finally, the African continent represents one of the largest UN voting blocks, holding three non-permanent seats on the UN Security Council, 13 seats on the Human Rights Council, and 54 seats in the UN General Assembly. Winning the support of African countries is becoming increasingly decisive for breaking deadlocks, fostering collaboration, and achieving particular outcomes in multilateral institutions. ⁹

Winning Hearts and Minds

The US and Europe have become increasingly alarmed by China's and Russia's engagement with countries in the "Global South" in recent years. ¹⁰ Competition is especially strong in African countries, where particularly China's growing engagement falls on fertile ground, because the current order has not yielded sufficient benefits for them. ¹¹ 23 of the world's 28 poorest countries are on the African continent. ¹² Moreover, many African countries suffer from protracted conflicts, political upheavals, and inadequate access to global public goods, including vaccines, food security, and climate finance.

Both China and Russia frame their approaches as distinct alternatives to what they purport to be a continuation of Western neocolonialism. ¹⁵ Based on their revisionist ambitions, both countries challenge the approaches to development by the US and Europe, which aim to advance areas including poverty reduction, health, and education and emphasize democracy, good governance, free markets, accountability, and transparency.

However, China and Russia challenge the approaches of the US and Europe in different ways. Russia, on the one hand, purposefully undermines US and European efforts in many countries in the "Global South." A case in point is the African continent, where Moscow follows rather limited objectives, mainly concentrating on arms sales, extractive industries, the expansion of export opportunities, and security assistance. ¹⁶ Its foreign aid, and its soft



"[...] Africa has come of age and Africa has to choose its partners and decide what kinds of partnership it wants.
[...] Let's just move into another era."¹⁴

Louise Mushikiwabo, Secretary General of the Organization de la Francophonie, Munich Security Conference, February 19, 2022

power in general, lag significantly behind that of the US, Europe, and China.¹⁷ For the most part, Russia plays a destabilizing role in African countries, aggravating instability and propping up authoritarian regimes through election interference, disinformation campaigns, and the deployment of Kremlin-linked mercenaries.¹⁸

China, on the other hand, is pursuing a long-term approach to development.¹⁹ It presents itself as a global power willing to step in where the US and Europe have failed to support countries in their sustainable development.²⁰ However, in practice, China uses development cooperation to challenge the rules-based order and foster its commercial and geopolitical interests.²¹

Chinese Engagement: Under the Pretext of Solidarity

Since Chinese President Xi Jinping assumed office in 2013, China's development policy has become more assertive. Beijing offers a development model which, it proclaims, is markedly different from the model advocated by the US and Europe. Launched in 2021, the Global Development Initiative is the intellectual umbrella that is supposed to create coherence across Chinese development activities (Figure 4.1). Insisting on its status as "the world's largest developing country," China has created a narrative to promote solidarity, shared values, and "win-win" cooperation between countries in the "Global South," in contrast to the Western donor–recipient approach. 23

China habitually criticizes the US and Europe for linking their foreign aid to demands for economic and political reforms, while portraying its own engagement as free from conditionalities. However, Chinese development cooperation comes with very different strings attached. On the one hand, Chinese investment imposes political strings. Recipients must respect Beijing's red lines, including the denial of Taiwan's independence and its policy toward Tibetans and Uyghurs, and vote accordingly in international bodies. On the other hand, Chinese development cooperation creates economic dependencies.²⁴ Hence, Beijing presents itself as an altruistic partner, but economic and geopolitical pursuits remain at the heart of Chinese development policy, often at the expense of partner countries.

The Belt and Road Initiative (BRI) is a case in point of China responding to the infrastructure investment needs of LMICs while promoting its own economic goals. While the US and Europe have mainly focused on advancing areas such as poverty reduction, they have largely neglected investment in infrastructure.²⁵ In fact, the investment needs of African

Figure 4.1
The Group of Friends of the 2021 Global Development Initiative (GDI)



What is the Global Development Initiative (GDI)?

Launched by Xi Jinping during his September 2021 virtual address to the UN General Assembly, the GDI is China's grand design for global development. It is framed as an effort to add momentum to the UN's 2030 Agenda for Sustainable Development, with poverty alleviation, food security, pandemic response, climate change, and green development defined as focal areas of activity. However, the GDI also represents an attempt to reshape global rules and approaches in line with Chinese interests. The initiative is based on Chinese concepts, such as the "right to development," which prioritizes economic development over other human rights, and "collective rights," which are seen to precede individual rights.

Data: Mercator Institute for China Studies. Illustration: Munich Security Conference



countries have grown sharply since 2015.²⁶ By 2030, investment needs for infrastructure will total 253 billion US dollars, while forecasts suggest that only 183 billion US dollars will be made available.²⁷ Nevertheless, infrastructure assistance by the G7 countries has been declining for years,²⁸ leaving a void that China has sought to fill. By now, 147 countries have joined the BRI, including 48 from Africa, 20 from Latin America and the Caribbean, and six from Southeast Asia.²⁹ But the BRI lacks transparency,³⁰ aggravates the indebtedness of partner countries, and cements their financial dependence on China,³¹ while increasing China's political clout (Chapter 3).

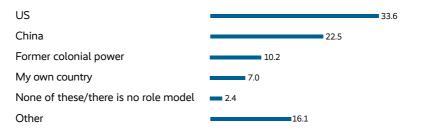
Although China has become a prominent development partner for African countries, Afrobarometer polling results strikingly show that the Chinese development model has not yet won the hearts and minds of African



"China will always be Africa's partner of mutual respect, equality, and sincere cooperation. We will firmly support African countries in pursuing [their] own development paths and seeking strength through unity." 32

Wang Yi, then-Chinese Foreign Minister, Coordinators' Meeting on the Implementation of the Follow-Up Actions of the Eighth Ministerial Conference of the Forum on China-Africa Cooperation, August 18, 2022 citizens. Citizens from 34 African countries polled from 2019 to 2021 still view the US model for development more positively than the Chinese one (Figure 4.2). However, they view the European model much less favorably, despite its similarities to the US, one which reflects the common perception that European countries have still not sufficiently confronted their colonial past. Europe's development efforts also largely go unnoticed compared to much more visible Chinese initiatives, even though European countries and EU institutions invest heavily in development. He US remains the largest donor country, having spent 35 billion US dollars in 2020, but it is closely followed by Germany (29 billion US dollars), EU institutions (21 billion US dollars), and the United Kingdom (19 billion US dollars). The share of China's foreign aid, which is comparable to the official development assistance pursued by the US and Europe, only amounted to around 5.4 billion in the same year. He

Figure 4.2
African views on which country provides the best model for development, 2019/2021, percent



Data: Afrobarometer. Illustration: Munich Security Conference

Covid-19 Vaccines: Overpromised and Underdelivered

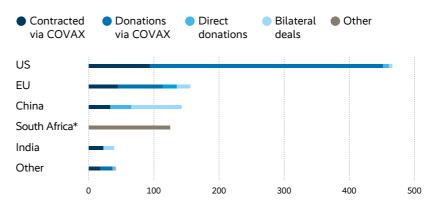
Since the onset of the Covid-19 pandemic, China and Russia have both used the delivery of medical and health assistance, including Covid-19 vaccines, to portray themselves as responsible global powers. At the same time, they were quick to highlight the failure of the US and its partners to ensure access to Western-produced Covid-19 vaccines for LMICs, while also claiming that these vaccines were unsafe.³⁷ China, in particular, used the dispatch of medical teams, donations of medical supplies, and delivery of Covid-19 vaccines to present itself as the most reliable partner for LMICs.³⁸



"The deep inequity that left Africa at the back of the queue for vaccines must not be repeated with [...] life-saving treatments. Universal access to diagnostics, vaccines, and therapeutics will pave the shortest path to the end of this pandemic." ³⁹

Matshidiso Moeti, WHO Africa Regional Director, Covid-19 press conference, January 20, 2022 In reality, China and Russia have fallen way short of their promises to deliver substantial amounts of vaccines to LMICs. ⁴⁰ China, for instance, had only delivered 10 percent of the 850 million doses it had committed to African and Asian countries by December 2021. ⁴¹ Russia had only produced 33 million of the targeted 800 million doses of its Sputnik V vaccine by May 2021. ⁴² In addition, there have been growing concerns about the efficacy of Sputnik V and China's Sinopharm and Sinovac vaccines, contributing to decreased trust and demand in the recipient countries. ⁴³ Nevertheless, on the African continent, China initially won the battle of narratives by successfully presenting itself as the key supporter in fighting the Covid-19 pandemic, even though, as of May 31, 2022, the US and Europe had delivered significantly more vaccines to African countries (Figure 4.3). ⁴⁴ The initial vaccine nationalism of the US and Europe, as well as their failure to provide the pledged amount of vaccine doses, have not helped to counter this narrative.

Figure 4.3
Covid-19 vaccine doses supplied to the African continent by producing economy, millions



*South Africa supplied around 23,310 vaccine doses through bilateral deals to other countries on the African continent. The amount is too small to be visible. Data: WTO; IMF. Illustration: Munich Security Conference

China's and Russia's delivery of Covid-19 vaccines also largely served their economic and geostrategic interests. Even though both China and Russia officially advocated for vaccines to be recognized as global public goods, they mainly delivered them on the basis of bilateral deals.⁴⁵ China, for instance, supplied most of its vaccines via bilateral deals and used COVAX,



an initiative by the World Health Organization (WHO) to supply vaccines to poorer countries and emerging economies, mainly as a platform to sell its vaccines instead of donating them (Figure 4.3). These Chinese vaccines also came with political strings, as China demanded that recipient countries cut ties with Taiwan. ⁴⁶ Contrary to its self-proclaimed role as a solidary anticolonial power, China thus used (far fewer than promised) vaccine deliveries to advance its geopolitical interests, deepen dependencies, and attack the credibility of the US and Europe in Africa.

Food Insecurity: Hunger Games

Food security is another policy field in which different development models compete. Staggering global inequality persists, with the number of people facing acute food insecurity rising from 135 million in 2019 to 345 million in 2022.⁴⁷ Sub-Saharan Africa is the most food-insecure region in the world by far, followed by the Middle East and North Africa, Latin America, and Asia–Pacific.⁴⁸ US and European multilateral development efforts in the field of food security have been insufficient, and Russia often acts as a spoiler, whereas China offers an alternative – which again comes with strings of dependency attached.

The traditional approach by Europe and the US to combatting food insecurity focuses on providing aid through multilateral bodies, such as the UN. For example, the US, Germany, and the European Commission are the largest donors to the UN World Food Programme (WFP).⁴⁹ European and US national food programs abroad are closely aligned with their multilateral efforts. They largely focus on providing emergency relief and strengthening the resilience of recipient countries to climate change.⁵⁰ However, US and European agricultural subsidies have often undermined their own development goals, as they depress prices on the world market, put farmers in LMICs out of business, and render these countries dependent on volatile imports.⁵¹

Unlike China, Russia does not isolate itself from multilateral food security efforts; indeed, it ranks 22nd as a donor to the WFP, often contributing with in-kind donations. ⁵² It was only through Russia's donations, for example, that the WFP was able to sustain its operation in Kyrgyzstan during the Covid-19 pandemic. ⁵³ However, Russia's war against Ukraine has exacerbated food insecurity by inducing a spike in food prices that were already high due to climate change and the Covid-19 pandemic, ⁵⁴ and also by creating supply chain bottlenecks for grain and fertilizer exports. ⁵⁵ Russia has strategically instrumentalized grain exports by blockading the main Black Sea



"No one has the right to weaponize food or play starvation games."⁵⁷

Ferit Hoxha, Albanian Ambassador to the UN, UN Security Council, October 31, 2022 trading routes to increase pressure on the international coalition supporting the Ukrainian government.⁵⁶ The consequences of this weaponization of food have been most felt by LMICs.

China hardly contributes to multilateral food aid at all; it donates around the same amount to the WFP as Haiti does.⁵⁸ At the same time, as part of its South-South cooperation, China has long been making considerable agricultural investments, especially in many African countries, which have helped increase agricultural production and productivity.⁵⁹ However, Chinese agricultural projects often lack longevity; they regularly collapse after flourishing initially, as they are set up for Chinese partners to eventually withdraw – leaving locals, who do not have sufficient means and training, to finance and run the projects without support. 60 While there is concern among African countries, for example Ghana and Tanzania, about the risk of debt linked to Chinese agricultural investments, many countries lack alternatives. 61 China portrays itself as a partner in solidarity, while in fact strategically creating dependencies by purchasing large areas of land and controlling much of the necessary infrastructure on the continent. When push comes to shove, China grabs land and resources, including by buying up grain reserves of food-insecure countries to fill Chinese stocks, rather than truly supporting those in need.62

Climate Finance: Blame Game

There is broad consensus that climate change is threatening developmental progress in low-income countries (LICs), which have contributed the least to global emissions, but suffer the most from the consequences. However, climate finance risks becoming collateral damage of geopolitical rivalries. Together with other rich states and regions, the US and EU pledged in 2009 to provide low-income countries with 100 billion US dollars in climate finance annually by 2020 for mitigation and adaptation measures. However, they are lagging behind, with payments reaching just over 83 billion US dollars in 2020,63 which goes against their promise to assume "common but differentiated responsibilities" based on their historical emissions. This is in part due to growing opposition, particularly in the US, to increasing climate finance unless China also contributes.

Both Russia and China controversially claim their status as developing countries based on the 1997 Kyoto Protocol, while actually ranking among the top four carbon emitting countries. ⁶⁵ Moscow officially acknowledges the importance of the Paris Climate Agreement, ⁶⁶ but in practice often slows



"We need a coalition of the willing to unlock climate finance for governments, countries, and entire regions to manage predictability of the future, build resilience capacity, and mitigation for a future that survives the coming climate tsunami."64

Sherry Rehman, Pakistani Minister of Climate Change, COP27, November 2022



"The West has a credibility problem. Compromising its values hampers the West's ability to foster stabilization, development, and democracy elsewhere in the world."

David Miliband, President and CEO of the International Rescue Committee, Munich Security Conference 2022, February 19, 2022 down climate change mitigation efforts globally, as the reliance on fossil fuels serves Russia both (geo)politically and economically.⁶⁷ The country is "at best a passive player and at worst an active saboteur of worldwide ambition."⁶⁸

China is more vocal regarding international climate financing and claims to support the demands of those most affected. China emphasizes that while it is not obliged to help, it has named sustainability as one of the priority areas of its GDI,69 and prides itself in having provided around 276 million US dollars in climate finance through South-South cooperation.70 This amount is dwarfed by the billions provided in multilateral efforts, which China does not join because it sees industrial countries as bearing the sole responsibility to compensate for their historical emissions.

The establishment of the Loss and Damage Fund at COP27 in November 2022 could potentially be a turning point in multilateral climate finance. It is an assistance mechanism for infrastructure damage caused by climate events in LICs, paid for by the big emitters. The EU proposed the fund, and called on the world's leading economies, including China, Saudi Arabia, and Russia, to contribute. The US is particularly insistent on Chinese contributions. Nonetheless, China has so far rejected giving up its developing country status despite now producing one-quarter of the world's carbon emissions. Climate finance is thus another issue area in which geostrategic competition, especially between China and the US, is carried out on the backs of the most vulnerable.

Fostering Cooperation on Equal Terms

The US and Europe will have to rethink their approaches to development cooperation with countries in the "Global South." They need to make their development models more attractive, as China offers an alternative model based on a narrative of solidarity and mutual benefits. The US and European countries will have to explore the limitations and deficiencies of their development approaches, ensure that these are tailored to the actual needs of their partner countries, and establish real partnerships. However, with regard to the African continent, the latest Afrobarometer data suggests that particularly the US development model still enjoys high approval, which the US can build on. The Chinese development model is not predestined to prevail. For European countries, however, it is essential that they address the frequent criticism of not having sufficiently confronted their colonial pasts to recalibrate their relationships with African countries.



"China is thinking about how to fuel its economy over the next 25 years. The Belt and Road is an important part of this larger strategy. I don't think we, in the West, think about the next 25 years in the same way because if we did, we would have a deeper, more strategic relationship with Africa." 78

Gayle Smith, President and CEO of ONE Campaign, October 24, 2022 To put partnerships with countries in the "Global South" on a new footing, Europe and the US need to live up to their promises about providing global public goods. Moving away from the donor–recipient relationship is key to enabling cooperation on equal terms. To compete with China, a new approach must simultaneously focus on short-term emergency relief as well as long-term financing that enables sustainable and resilient systems in the partner countries. The EU Global Gateway as well as recent G7 initiatives, including the Global Alliance for Food Security, the Pact for Pandemic Preparedness, and the Partnership for Global Infrastructure and Investment, are a promising start.

For countries in the "Global South," the renewed attention carries the risk of them becoming a playing field for great-power competition once again. In the medium term, the support of external actors in the provision of public goods, such as healthcare, food, and climate security, will likely continue to play an important role for many. This means dealing with the strings that come attached. At the same time, countries in the "Global South" can use the competition between different actors for their own benefit and select partners whose priorities align with their own. ⁷⁹ This presents an opportunity to shape the international order to better reflect their interests. ⁸⁰

Key Points

- There is renewed attention on countries in the "Global South," as China, Russia, the US, and Europe seek to use development cooperation to secure economic opportunities, forge political alliances, and shape the rules of the international order.
- 2 Both Russia and China are actively challenging US and European approaches to development cooperation. While Russia's engagement is often limited to sparking instability, China offers an alternative model for development, proclaiming solidarity with and mutual benefits for countries in the "Global South."
- While China's narrative of being a reliable partner in tackling global challenges is often successful, economic and geopolitical pursuits remain at the heart of its development efforts, including on Covid-19 vaccines, food security, and climate finance.
- The US and European countries need to rethink their cooperation with countries in the "Global South" and reposition themselves as attractive and credible development partners. Living up to promises and cooperating on equal terms will help put the relationships on a new footing.
- While the increased interest of external powers in countries in the "Global South" bears the risk of new dependencies, it also represents an opportunity for these countries to expand their agency and advocate for a more equitable international order.



Energy Security

(5) Refueled

What are the economic and geopolitical ripple effects of Moscow's energy warfare against Europe, and how will the cutting of energy ties between Russia and Europe alter global fossil fuel trade flows? Will the shift to renewables allow liberal democracies to wean themselves off energy dependencies from authoritarian powers? How does the race for clean-energy technologies play into the broader geopolitical competition between China and the US and its partners?

Refueled

Julia Hammelehle

Russia's war against Ukraine and its weaponization of energy has ushered in a global energy crisis of "unprecedented depth and complexity," with Europe at the very heart of it. Perceptions of Russia as a reliable energy partner have been torn to shreds. And energy ties between Russia and Europe will be permanently severed. The result is a major reshuffling of international energy trade flows, increasingly reflecting geopolitical fault lines rather than market logic. The securitization of energy will not stop with the hydrocarbon age, but extend to a greener future. Since China occupies a dominant position across clean-energy supply chains, Beijing is at the center of liberal democracies' concerns about new vulnerabilities emerging with the shift to renewables. And as a key to future prosperity, green technologies are a central component of the growing geopolitical competition between China and the US and its partners.

The Costs of Energy Reliance on Moscow: Repriced

For decades, European energy relations with Russia, heavily driven by Berlin, were based on two fundamentals: the logic of the lowest price and the belief that Moscow would remain a reliable energy partner even in a context of worsening relations with the West, with energy providing a "bridge" for improving political ties. Although decision-makers and experts in Europe and partner countries voiced strong concerns about Russia's energy dominance in Europe, fossil fuel dependencies increased further. This was the case even after Moscow's annexation of Crimea. Between 2005 and 2010, Russia accounted for 30 percent of European natural gas imports on average. Between 2015 and 2020, this figure stood at 40 percent.² Russia's invasion of Ukraine and full-scale energy warfare against Europe brutally exposed the fallacies of an energy policy guided by liberal market logic and destroyed beliefs in the political value of deep energy ties with the Kremlin. The close energy relations did not "draw Russia into the democratic fold of its Westerns neighbors," but instead rendered liberal democracies vulnerable to the Kremlin's revisionist agenda.³ The risk of losing its main export market did not prevent Moscow from using energy as a weapon against Europe. And given the weight of Russia in international energy markets as "the world's largest exporter of fossil fuels," Western partners have struggled to exert pressure on Moscow by imposing sanctions on its hydrocarbons.5

In the months before its invasion of Ukraine, Russia had already prepared the ground for its ensuing energy blackmail. Despite high demand, Russia held back "at least one-third of the gas it could [have] sent to Europe." Two months after the invasion, Moscow then began cutting off gas deliveries to



"Our prosperity has been based on cheap energy coming from Russia. Russian gas – cheap and supposedly affordable, secure, and stable. It has been proved not [to be] the case."6

Josep Borrell, EU High Representative for Foreign Affairs and Security Policy, EU Ambassadors Conference, October 10, 2022



"[T]his is an overt gas war that Russia is waging against a united Europe – this is exactly how it should be perceived."9

Volodymyr Zelenskyy, Ukrainian President, address in Kyiv, July 25, 2022 Bulgaria and Poland, and progressively reduced supplies to Europe over the summer. By November, Russian pipeline gas flows to Europe had nearly ceased. Coming on top of already tight energy markets, Russia's curtailment of gas supplies and Western sanctions on its oil and coal exports sent shockwaves across global energy markets, hitting Europe particularly hard.

Natural gas prices reached record levels in August, with prices about ten times higher than their average level over the past decade. 11 Electricity prices tripled in the first half of 2022.12 Across Europe, governments massively intervened in gas and electricity markets¹³ and ratcheted up support to shield households and industries from the impact of rising prices. 14 So far, concerns that Europe's reliance on Russian energy would dilute its response to Moscow's aggression have not materialized, and Western partners have remained largely united. Yet worries about the risk of social unrest, growing friction within the EU, and eroding support for Ukraine remain. Although prices are down from summer highs and Europe's gas storage has been refilled, the crisis is far from over. Energy prices will continue to remain high, and European competitiveness is under increasing pressure. 15 As the IMF put it, "[w]inter 2022 will be challenging for Europe, but winter 2023 will likely be worse."16 The EU is still struggling to find a joint approach, as illustrated by the months-long negotiations over a gas price cap. 17 And national responses such as Germany's 200 billion euro economic "defense shield" have provoked criticism for undermining EU solidarity and distorting the internal market.¹⁸

The ripple effects of Putin's energy warfare extend far beyond Europe. Across low-income countries, elevated energy prices are a key factor for surging food insecurity and extreme poverty, especially in sub-Saharan Africa (Chapter 4).¹⁹ And as Europe rushed to replace Russian pipeline gas, it outbid states in Asia for spot supplies of liquefied natural gas (LNG), leading to energy shortages and widespread power cuts in countries such as Pakistan and Bangladesh.²⁰ Since markets will remain tight over the coming years, the "scramble for fuel" will continue. This risks sowing discord between Europe and low-income countries and weakening the global front against Moscow's aggression.



"By launching a war on Ukraine, Putin has also fired an 'energy missile' at Europe. He wants to obliterate our economies, weaken our societies, and destroy our morale." 10

Charles Michel, President of the European Council, newsletter, October 10, 2022

Energy Trade Flows Post-Invasion: Rerouted

The severed energy ties between Russia and Europe are unlikely to be mended. This is prompting a major reshuffling of fossil fuel trade flows, with Russia turning to the Chinese market, and Europe increasing its imports from the US. The post-invasion energy map will thus increasingly reflect geopolitical fault lines, even if it will not neatly represent the democracy—autocracy

divide: Middle Eastern countries will be key exporters to both Europe and Asia. And for the time being, LNG shipments from Australia and the US to China are likely to continue.

As energy trade flows between Russia and Europe will largely cease, Moscow will shift its supplies eastwards. Yet the gains in oil and gas markets in Asia will not be able to make up for the losses in exports to Europe (Figure 5.1). While the soaring energy prices in the months after the invasion led to windfall revenues for Moscow, filling its war chest with 228 billion euros by November 2022, 21 in the longer term, the energy war that Russia started will leave the petropower in a much-diminished position in international energy. Compared to prewar estimates, Russia's share of global oil and gas trade is bound to halve by 2030. 22 This diminished role extends beyond the fossil fuel age, as Russia's hydrogen ambitions are also faltering. 23

With oil flows to Europe phased out, Russia is turning to Asian markets. Profiting from heavily discounted prices, imports by China, India, and Turkey have surged.²⁴ Not all Russian barrels will find a new home though.²⁵ According to the IEA, by the mid 2020s, oil exports by North America will supersede those of Russia, while it is Middle Eastern exporters that will fill most of the gap left by Moscow.²⁶ China and India will heavily drive oil demand, and Middle Eastern countries will meet large shares of it (Figure 5.1). The Middle East will thus gain further strategic importance for China and India, with energy relations driving closer political and economic ties.²⁷ This is illustrated by major Chinese investments through the Belt and Road Initiative in the Middle East, with Saudi Arabia as the single-largest recipient in the first half of 2022.28 Amid a declining US presence in the region, liberal democracies' concerns about China's rising influence are growing. The deepening ties between China and the Middle East might evolve to include a stronger Chinese military and security footprint, potentially undermining the West's security partnerships with countries in the region.²⁹

Further strategic challenges for the US and its partners arise with regard to the rising share of global oil production by members of the Organization of the Petroleum Exporting Countries (OPEC).³⁰ The current energy crisis shows that even the US as a net exporter cannot insulate itself against the vagaries of global oil markets and the steps taken by major producers.³¹ The September 2022 decision by OPEC+ to cut production, largely driven by Saudi Arabia, was met with fury in Washington, DC, which feared increasing prices and interpreted Saudi Arabia's move as siding with Russia.³²

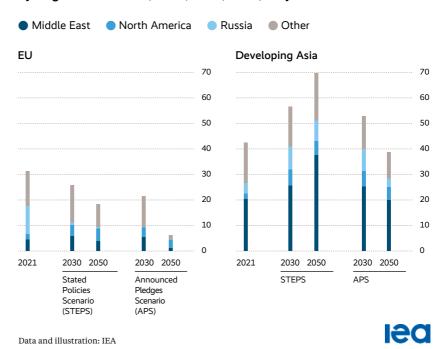


"At best, the [OPEC] cartel has rejected any idea of being a helpful actor and chosen profit over aiding the world economy. At worst, they've made a conscious choice to align themselves with Putin over the US." 33

Elissa Slotkin, US Representative, Twitter, October 6, 2022

Figure 5.1

Crude oil and natural gas imports to the EU and developing Asia, by origin and scenario, 2021, 2030, 2050, exajoules



As with oil, Russia is shifting its gas flows to Asia. Yet at least in the short term, it will be much harder for Moscow to make up for its losses in the European market. Building the necessary pipeline infrastructure will take at least a decade.³⁴ And new LNG projects in the Arctic rely on foreign technology and financing, now sanctioned by Western partners.35 China will be a major importer of Russian gas, but supplies are still a fraction of the former volumes to Europe.³⁶ While this could change with a new pipeline project, it remains unclear whether and under what conditions China "will make the deal."37 Given Moscow's increasing reliance on the Chinese market, Beijing will set the terms while seeking to avoid overdependence on Russia.³⁸ For pipeline gas, China might deepen ties with Central Asia; for LNG, it is boosting domestic production and diversifying its imports, including by scaling up volumes from Qatar.³⁹ Despite the geopolitical tensions, China has also been increasing LNG imports from Australia and the US. Combined, this accounts for around half of Chinese imports, providing Australia and the US with potential leverage.40



"The whole of the West developed on the back of fossil fuels – even as we speak, some Western nations are deciding to bring coal back into their energy mix because of the war. [...] Is the West saying Africa should remain undeveloped?"⁴⁵

Matthew Opoku Prempeh, Ghanaian Minister of Energy, Bloomberg, July 10, 2022



Energy Security in a Greener World: Redefined

Notwithstanding the initial rush for fossil fuels, ⁴⁶ in the medium to long term, the crisis is likely to accelerate rather than slow down the path to net zero. ⁴⁷ As the world weans itself off fossil fuels, green energy is gaining in strategic importance. And while the transition to renewables allows liberal democracies to reduce hydrocarbon dependencies, new vulnerabilities are emerging. Given China's position as "kingpin" of clean-energy supply chains, ⁴⁸ Beijing is at the center of concern for the US and its partners.

The great potential for renewable energy around the world should allow countries to diversify. Yet green supply chains carry their own risks. This is also the case for hydrogen. Considered as one of the keys to decarbonizing industries and thus future economic competitiveness, momentum behind hydrogen is growing. Since it is technically possible to produce green hydrogen in nearly every country, there should be an increasing number of actors joining the market over time (Figure 5.2). For regions such as Europe that will not be able to produce enough hydrogen themselves, this opens up diverse options for trade. Countries such as Chile, Namibia, and Morocco will emerge as new export powers. Yet in some cases, old suppliers will also be the new ones. Building on favorable resource endowments and existing



"Renewable energies don't just contribute to energy security and supply. Renewable energies free us from dependency. That is why renewable energies are freedom energies."

Christian Lindner, German Minister of Finance, special session of the German Bundestag, Berlin, February 27, 2022

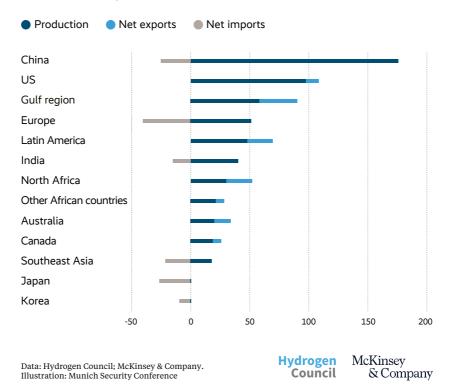


"That [shift to green hydrogen] is not just a change in our energy mix. It's a change in global political relations, it will bring more equality between states, and it will allow us to stand stronger in defending our values, because we can no longer be blackmailed by the producers of hydrocarbons." 53

Frans Timmermans, Executive Vice-President of the European Commission and Commissioner for the European Green Deal, EU Hydrogen Week, October 27, 2022 energy infrastructure, Australia and Middle Eastern countries are pursuing ambitious hydrogen strategies.⁵¹ Since North Africa and the Gulf region are well placed to export hydrogen to Europe, European leaders face the question of whether they want to yet again deepen energy ties with autocratic countries.⁵²

While it will still take several decades until trade in hydrogen fully unfolds, the race for leadership in hydrogen technologies is on. Electrolyzers are the key component for the production of green hydrogen, and are thus at the core of the competition; Europe is a leader in this space.⁵⁴ But the expansion of electrolyzer manufacturing comes with critical dependencies in raw materials supply chains. This is most notable with regard to nickel, where Europe imports large shares from Russia and relies on China for nickel smelting; for platinum and iridium, Europe heavily relies on South Africa.⁵⁵ And since current manufacturing capacities will not be sufficient to meet

Figure 5.2
Production and trade of hydrogen and derivatives for key regions and countries, by 2050, million tons



the EU's hydrogen ambitions, Europe might have to turn to its main competitor, China, which is "on its way to a market takeover." ⁵⁶

This twofold challenge of a high concentration of critical raw materials (CRMs) abroad and China's strong position in clean-energy technologies extends beyond the hydrogen industry – it is a shared feature of green energy markets. With growing demand for low-carbon technologies such as electric vehicles (EVs), demand for CRMs is "set to soar." Since CRMs are highly concentrated in a small number of – often fragile – states, supply risks are substantial. But for liberal democracies, the major concern relates to China's dominant role across CRM supply chains. China's position in the mining of CRMs is substantial, especially given its major acquisitions in overseas mining projects, which Beijing has further intensified since 2021. But its key role in CRMs comes from the processing part of the value chain (Figure 5.3). This dominance is particularly acute with regard to rare earth elements (REEs).

Strategies by the US and its partners to reduce their reliance on Chinese imports of REEs have proliferated amid growing geopolitical tensions and Beijing's demonstrated willingness to use its near-monopoly as political leverage. In 2010, China halted the supply of REEs to Japan in the context of a territorial dispute; in 2019, it threatened the US with export restrictions amid the China–US trade conflict.⁶⁰ Gaining greater independence from China in REEs and other CRMs will require considerable investments and international cooperation – and will still take time, leaving international partners vulnerable to potential Chinese coercion for the years to come.⁶¹

Building on its long-term industrial strategies and prime access to CRMs, China occupies a "key manufacturing node" in clean-energy technologies. ⁶³ By 2020, ten Chinese firms were among the top 15 wind turbine manufacturers. ⁶⁴ In EV batteries, China accounts for three quarters of global production. ⁶⁵ And China's share in all the manufacturing stages of solar panels exceeds 80 percent, and is expected to rise further. ⁶⁶ In the EU, solar panel imports have skyrocketed since Russia's invasion of Ukraine; China makes up 90 percent of them. ⁶⁷

Thus, to achieve their renewable energy targets and assume credible climate leadership, liberal democracies will have to rely on Beijing.⁶⁸ This reliance raises concerns not just about geopolitical vulnerabilities and economic competitiveness, but also human rights, as key components for EV batteries



"We cannot allow countries to use their market position in key raw materials, technologies, or products to have the power to disrupt our economy or exercise unwanted geopolitical leverage."62

Janet L. Yellen, US Secretary of the Treasury, Atlantic Council, April 13, 2022 MUNICH SECURITY REPORT 2023 ENERGY SECURITY

Figure 5.3
Critical minerals supply chains, selected minerals and indicators

Mineral	Clean-energy technology that demands a high input of the mineral	Rise in demand, 2050 relative to 2021, APS*, factor	Share of top three countries in mining, 2021**, percent		Share of top three countries in processing, 2019, percent	
Cobalt	Electric vehicles (EVs), battery storage	6.2	DR Congo: Russia: Australia:	71 4 3	China: Finland: Belgium:	65 10 5
Copper	Solar, wind, bio- energy, electricity networks, EVs, battery storage	2.8	Chile: Peru: China:	27 11 9	China: Chile: Japan:	40 10 6
Lithium	EVs, battery storage	24.0	Australia: Chile: China:	55 26 14	China: Chile: Argentina:	58 29 10
Nickel	Geothermal, EVs, battery storage, hydrogen	12.3	Indonesia: Philippines: Russia:		China: Indonesia: Japan:	35 15 8
Rare earth elements	Wind, EVs, battery storage	7.2	China: US: Myanmar:	60 15 9	China: Malaysia: Estonia:	87 12 1

^{*}APS: Announced Pledges Scenario

Data: IEA; US Geological Survey. Illustration: Munich Security Conference



and solar modules are produced in Xinjiang. ⁶⁹ For China, its outsized role in green energy will reduce the country's own energy import risks and provides Beijing with political leverage and a head start in what is to be a "multi-trillion-dollar" clean-technology market."⁷⁰

To reduce reliance on China and foster US competitiveness, Washington, DC has responded by announcing significant subsidies for clean technologies as part of the Inflation Reduction Act (IRA). While the IRA has been applauded as a major push for the US climate agenda, domestic content requirements to qualify for subsidies have raised concerns about potentially slowing down the uptake of green technologies and provoking trade frictions with US partners.⁷¹ Fearing it will lose out against US and Chinese industrial policies,

^{**}Figures for 2021 are projections.

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EU plans to relax state aid rules and scale up public funding for clean technologies are gaining traction.⁷²

The increasing alignment of security, climate, and economic goals could be a catalyst for the climate agenda. Yet as security and industrial policies are increasingly driving climate and energy approaches, trends toward protectionism are intensifying. Localizing supply chains might help reduce dependencies, but trade has been essential in bringing down costs of renewables and preserving flexibility in energy markets. Energy is exemplary of economic relations in times of growing geopolitical tensions, with security rather than liberal market logic increasingly shaping policy, and government interventionism rising. But more fragmentated energy markets come with risks not only for economic growth, but also for the path to net zero and energy security.

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Key Points

1 Moscow's weaponization of energy has shattered perceptions of Russia as a reliable energy partner and exposed Europe's overreliance on Russian fossil fuels. Ripple effects extend far beyond European markets, ushering in a global energy crisis.

- As the severed energy ties between Europe and Russia are unlikely to be mended, fossil fuel trade flows will see a major reshuffling, increasingly reflecting geopolitical fault lines rather than market logic.
- The securitization of energy will extend to green markets. The shift to renewables comes with new vulnerabilities, and since China has a dominant position across cleanenergy supply chains, the dependency on Beijing is at the center of concern for liberal democracies. Key to future prosperity, green technologies will be a major component in the geopolitical competition between China and the US and its partners.
- The increasing alignment of security, climate, and economic goals may be a boon for the climate agenda. Yet more politicized and fragmented markets carry their own risks for energy security and the transition to net zero.



Nuclear Order

6 Atomized

What does the combination of increasingly reckless nuclear rhetoric from Russia, accelerated expansion of China's nuclear arsenal, potential proliferation by Iran, and continuing North Korean missile tests mean for international nuclear security? What are the prospects for reviving key nuclear arms control treaties? And what might the nuclear order of the future look like?

Atomized

Jintro Pauly

For the first time since the end of the Cold War, the use of a nuclear weapon in Europe is a plausible scenario. Since launching its full-scale invasion of Ukraine on February 24, 2022, Russia has issued numerous thinly veiled nuclear threats against its neighbor. That it would actually carry out such a threat seems unlikely, but this possibility cannot be ruled out. In its war against Ukraine, Russia has not only used reckless rhetoric, but reckless actions as well: its shelling of nuclear plants and abudctions of personnel have put both the safe operation of the Zaporizhzhia nuclear plant, the largest in Europe, as well as the safe storage of radioactive materials at the former nuclear power plant Chernobyl at risk.

With its revisionist war of aggression, Russia has upended the international nuclear order. By threatening the use of nuclear weapons against Ukraine, a state that in 1994 gave up its own nuclear arsenal in exchange for Russia's commitment to respect Ukrainian sovereignty and territorial integrity, Russia has undermined two key pillars of this order: the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the nuclear taboo. The NPT, at its core, is a grand bargain in which the five recognized nuclear-weapon states – China, France, Russia, the United Kingdom, and the United States – pledged to act as responsible nuclear powers and pursue eventual nuclear disarmament in exchange for the continued non-proliferation of the other NPT parties. The nuclear taboo refers to the idea that nuclear weapons are weapons of mass destruction so abhorrent that their use is considered unacceptable. By questioning the nuclear taboo, neglecting its obligations under the NPT, and breaking its commitment to Ukraine, Russia has lost its credibility as a responsible nuclear-weapon state.

Russia's nuclear threats pose a fundamental challenge to those seeking to prevent the use of nuclear weapons now and in the future. If a Russian nuclear strike against Ukraine were to go unpunished, it would severely damage the existing nuclear order and make future use of nuclear weapons more likely, as it would set a precedent of nuclear attacks being an acceptable and possibly beneficial course of action in military conflict. There is also a risk, however, of triggering a spiral of further escalation with a strong response to a Russian nuclear attack. Therefore, the international community's response to such an attack would have to be measured enough to prevent further escalation, yet strong enough to prevent the precedent of an unpunished nuclear strike.



"The citizens of Russia can rest assured that the territorial integrity of our Motherland, our independence and freedom will be defended – I repeat – by all the systems available to us."4

Vladimir Putin, Russian President, Address to the Nation, September 21, 2022



"The Russian invasion and the war in Ukraine, in many senses, has shone a very bright light on the cracks in the façade of the nuclear disarmament and non-proliferation regime which have started to emerge some time ago." 10

Izumi Nakamitsu, UN High Representative for Disarmament Affairs, James Martin Center for Nonproliferation Studies, June 10, 2022 Alas, Russian brinkmanship is only the most immediate threat to the international nuclear order. A wide range of other threats and challenges stem from other revisionist actors. In an environment of rising geopolitical tensions and eroding arms control regimes, such challenges have the potential to fundamentally change the global nuclear security architecture.

Expiring Arms Control Treaties: Approaching the Wrong Global Zero

The international nuclear arms control regime has been eroding for some time. Since the 2002 US withdrawal from the US-Russian Anti-Ballistic Missile Treaty, North Korea has left the NPT, Russia violated the Intermediate-Range Nuclear Forces Treaty – prompting the US to withdraw from it –, the US pulled out of the Joint Comprehensive Plan of Action, also known as the Iran nuclear deal, and the US and Russia left the Open Skies Treaty. New START, the last existing bilateral nuclear arms control treaty between the US and Russia, is set to expire in 2026, and its replacement by a new

treaty is uncertain. ¹² Although US President Joseph Biden recently expressed his willingness to negotiate one, he also indicated it is Russia's responsibility to demonstrate its commitment to resuming arms control cooperation after its invasion of Ukraine. ¹³ Whether Russia will take this initiative is uncertain. With ever fewer nuclear arms control treaties in place, the world is approaching the wrong kind of "global zero" – a world with zero arms control treaties but an increasing number of nuclear warheads.

The five nuclear-armed permanent UN Security Council members caused a flicker of optimism when they issued a statement in January 2022 stating that nuclear war "cannot be won and must never be fought," thereby seemingly reaffirming their commitment to the nuclear taboo. ¹⁴ This optimism waned, however, as Russia launched its invasion of Ukraine and started issuing nuclear threats. In August, the NPT Review Conference, which was held by the parties to the NPT to review the treaty's implementation, failed to adopt a substantive outcome document due to Russian objections over a reference to the safety of the Zaporizhzhia nuclear power plant. This failure dealt yet more damage to the nuclear order and further isolated Russia on the international stage. ¹⁵ The lack of cooperation between the nuclear-weapon states party to the NPT, a key pillar of the international nuclear order, undermines the sustainability of this order. ¹⁶

With its withdrawal from the Iran nuclear deal, the US has not only violated a UN Security Council resolution,¹⁷ thereby dealing a further blow to the UN's authority, but also greatly reduced Iran's nuclear breakout time.¹⁸



"If Iran gets an operational nuclear weapon, all bets are off. [...] Regional states will certainly look towards how they can ensure their own security."²¹

Prince Faisal bin Farhan Al Saud, Saudi Foreign Minister, World Policy Conference, December 11, 2022 Although negotiations to revive the agreement started in 2021, revival efforts are complicated by domestic opposition to the agreement in both Iran and the US, Iran's recent deliveries of weaponry to Russia for use against Ukraine, and Iran's brutal repression of domestic protests. ¹⁹ If Iran were to produce nuclear warheads, this could trigger a nuclear arms race in the Middle East. Proliferation cascades have been wrongly predicted before, and other would-be Middle Eastern nuclear powers would face obstacles on their way to the bomb, but Saudi Arabia would feel pressured to seek nuclear weapons in such a scenario. Meanwhile, Iranian proliferation might cause Israel – already a nuclear power – to consider a preemptive strike against Iran, given the long history of Iranian threats to annihilate the country and its people. ²⁰

These new developments that further hollow out the nuclear arms control regime come on top of already existing challenges to this regime. Already, four states outside of the NPT framework possess nuclear weapons. Three of these, India, Israel, and Pakistan, never signed the NPT.²² The fourth, North Korea, withdrew from the NPT in 2003, although it is disputed whether this withdrawal is valid under international law.²³ Political developments in some of these states also pose risks to international nuclear security. Enduring political instability in Pakistan raises questions on how responsibly the country will be able to handle its nuclear arsenal in the future.²⁴ North Korea, meanwhile, conducted 86 missile tests in 2022 alone, a record number for the country.²⁵ There are also indications that it is preparing for a new nuclear test. In September, North Korean leader Kim Jong-un announced a more assertive nuclear posture, which allows for nuclear first-use under certain circumstances.²⁶

These "extra-NPT" nuclear activities are examples of a revisionist challenge by the non-NPT nuclear-weapon states and Iran vis-à-vis the NPT-based nuclear order, which seeks to classify them as non-nuclear-weapon states. With its aggressive behavior, North Korea takes this challenge even further than the other states, thereby threatening the security of states in East Asia and beyond.

Meanwhile, the circumstances for reinvigorating nuclear arms control regimes are suboptimal: great-power competition is becoming ever more intense, trust among nuclear and would-be nuclear adversaries is low, and few are willing to risk losing geopolitical competitive advantages by pursuing arms control measures. Nonetheless, the international community must

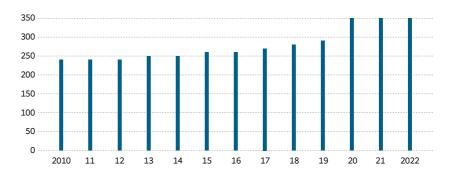
recommit to arms control. The further erosion of the international nuclear arms control regime has removed important safeguards against further nuclear proliferation, arms races between existing nuclear powers, unintended nuclear escalations, and all the risks that come with those. But the Cold War has shown that even in times of great-power competition, arms control cooperation may be possible.

Trinity Test: China as the Third Nuclear Superpower?

A new nuclear arms race may already be underway: there are strong signs that China is on track to massively expand its nuclear arsenal in the coming decade. ²⁷ Compared to Russia and the US, with 4,477 and 3,708 nuclear warheads, respectively, China maintains a modest arsenal of 350 warheads. ²⁸ This arsenal has, however, grown steadily in recent years and might grow even faster in the coming decade (Figure 6.1). ²⁹ In 2021, the US Department of Defense estimated that China might possess as many as 1,000 warheads by 2030, ³⁰ given that China is currently constructing approximately 280 new nuclear missile silos, more than ten times as many as it operates today (Figure 6.2). ³¹

There are some caveats to these predictions. Massive Chinese nuclear expansion has been predicted before, but it never manifested.³² It is also uncertain whether China will fill all silos with missiles, or how many warheads it plans to equip each missile with. It is possible that the US Department of Defense overestimated these unknown factors when making its 2030 forecast.

Figure 6.1
Growth of China's nuclear arsenal, 2010–2022, number of warheads



Data: Hans M. Kristensen and Robert S. Norris; Hans M. Kristensen and Matt Korda. Illustration: Munich Security Conference

If China were to immensely expand its nuclear arsenal or possibly even seek nuclear parity with Russia and the US, this would create a nuclear order fundamentally different from the bipolar nuclear order of the Cold War. Nuclear stability would then have to be achieved between at least three competing nuclear superpowers and the US would need to deter two nuclear near-peers. This would vastly complicate arms control efforts, as the dynamics of negotiations and verification mechanisms would inevitably be more complex with three parties. Use the complications are manifesting themselves already, as China does not show any intention of engaging in trilateral arms control with the US and Russia, thereby undermining US

Figure 6.2 Nuclear missile silos in China, 2022

- 10 suspected nuclear missile silos discovered since 2019
- 10 nuclear missile silos in existence before 2019



Data: Hans M. Kristensen; Hans M. Kristensen and Matt Korda; Scott LaFoy and Decker Eveleth; Rod Lee; Joby Warrick. Illustration: Munich Security Conference



"China is conducting an unprecedented, concerning nuclear buildup without any transparency."³⁶

Joseph Biden, US President, UN General Assembly, September 21, 2022 and Russian appetite to engage in mutual bilateral arms control from which China might gain strategic advantages.

China's nuclear expansion also constitutes a revisionist challenge to the nuclear order in which the US and Russia are the two nuclear superpowers. By expanding its nuclear arsenal without being transparent about it and refusing to engage in arms control talks, China seeks to either join the ranks as a nuclear superpower, or at least strengthen its strategic position relative to Russia and the US. This expansion could, for example, provide China with additional leverage in a confrontation with the US over Taiwan. 35

Separation Anxiety: Proliferation Risks Among US Allies

Ever since former US President Donald Trump sowed doubt about the US's commitment to defending its allies, the credibility of US extended nuclear deterrence has become the subject of debate.³⁷ Trump may no longer be president, but a return to the White House of someone without a strong commitment to the US's alliances remains a possibility. Furthermore, the possibility that the US nuclear arsenal may soon have to deter two nuclear peer-competitors raises questions regarding the long-term ability of the US to live up to its extended nuclear deterrence commitments.³⁸ Some experts have warned that a further loss of credibility in this area could trigger a new form of nuclear revisionism: if US allies no longer trust in the US security guarantees that they received in exchange for their commitment to non-proliferation, some of them may seek to become nuclear-weapon states themselves.³⁹

US allies in Asia, for example, face both an expanding Chinese nuclear arsenal and continuing nuclear threats by North Korea. In South Korea, popular support for the acquisition of a national nuclear arsenal is increasing, with one 2022 poll putting it as high as 71 percent. In Japan, on the contrary, several polls in recent years showed broad popular support for joining the Treaty on the Prohibition of Nuclear Weapons (TPNW). At the same time, Japan's 2022 national security strategy, although not announcing nuclear proliferation in any way, does seem to signal a pivot to much more assertive foreign policy and security policy in response to the increasing threats posed by China and North Korea. This, together with the fact that Japan is a nuclear-threshold state, meaning it possesses the technological capabilities to develop nuclear weapons if it decided to do so, would make Japan a potential proliferation risk if it were to ever lose faith in the US-provided nuclear umbrella.



"We must recognize that this treaty is the democratic wish of the overwhelming majority of UN member states and the people of the world. No longer should the world's people's be held hostage to the unspeakable terror of these weapons."⁴⁸

Alvin Botes, South African Deputy Minister of International Relations and Cooperation, first meeting of state parties to the TPNW, June 21, 2022

Speaking Firmly, but Not Carrying a Big Stick: The Treaty on the Prohibition of Nuclear Weapons

The TPNW, which has 68 state parties and 91 signatory states, poses a different kind of revisionist challenge to the existing nuclear order.⁴⁴ As frustration over the lack of progress on arms control by NPT nuclear-weapon states grew, several civil society organizations initiated a campaign for a treaty banning nuclear weapons altogether.⁴⁵ In 2017, this led several non-nuclear-weapon NPT states to launch the TPNW in an effort to promote the implementation of NPT Article VI, which outlines the obligation of nuclear-weapon states to work toward complete nuclear disarmament.⁴⁶ The TPNW thus seeks to change the nuclear order by eliminating all nuclear weapon arsenals, including those of the states permitted to have them under the NPT. It mainly draws support from smaller states from the "Global South" that neither have nuclear weapons nor enjoy the benefits of a nuclear umbrella (Figures 6.3 and 6.4).⁴⁷

Figure 6.3 Global nuclear order, 2022

- Nuclear-weapon state outside of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)*
- Nuclear-weapon state recognized by the NPT
- Nuclear-weapon host state
- State under or soon to be under a nuclear umbrella
- State part of a nuclear-weapon-free zone or a signatory of the Treaty on the Prohibition of Nuclear Weapons
- Neither category



*Israel has never officially confirmed or denied the existence of its nuclear weapons. It is assumed that Israel developed a nuclear weapons capability in the 1960s.

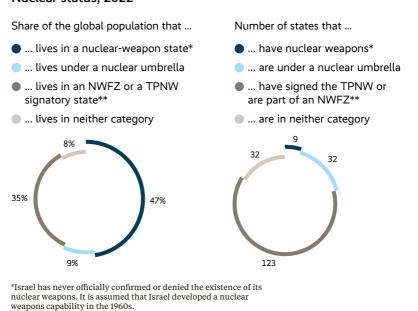
Data and illustration: Center for International Security at the Hertie School

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Faced with deteriorating geopolitical conditions, the TPNW has been unable to make significant inroads among states who enjoy the benefits of nuclear deterrence, either through their own nuclear arsenal or an ally's extended nuclear deterrence. In its 2022 Strategic Concept, the North Atlantic Treaty Organization (NATO) reaffirmed it will remain a nuclear alliance as long as nuclear weapons exist.⁴⁹ The US also reiterated its rejection of the TPNW in its 2022 Nuclear Posture Review.⁵⁰ And in Europe, Russia's attack on Ukraine has decreased enthusiasm for the TPNW. A 2022 public opinion poll showed that support for nuclear deterrence has significantly increased in Germany, a country traditionally very skeptical of it. Now, a plurality of 38 percent of the population supports Germany's participation in NATO's nuclear sharing arrangement, whereas 31 percent reject it. 51 The 2022 decision to buy dual-capable F-35 aircraft signaled that the German government remains committed to NATO's nuclear-sharing arrangement.⁵² Finland's and Sweden's applications to join NATO have probably ended any hopes of these states, both TPNW observers, actually joining the treaty.53 These issues add to the already existing problems for the TPNW, such as criticism of its proposed non-proliferation

Figure 6.4 Nuclear status, 2022

Nuclear Weapons



**NWFZ: nuclear-weapon-free zone; TPNW: Treaty on the Prohibition of

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verification mechanisms and the fact that its strategy of relying on societal pressure to motivate nuclear-weapon states to join is ineffective in autocracies and thus selectively targets democracies.⁵⁴

Although the TPNW may face difficulties convincing more states to join, its broad support in the "Global South" is a signal to be taken seriously. It shows the widespread frustration among non-nuclear-weapon states in this part of the world with the lack of progress on implementing Article VI of the NPT and with the inequality of the nuclear order. If this discontent is not addressed, the NPT risks losing credibility.

The Nuclear Order Is Dead - Long Live the Nuclear Order?

The existing nuclear order faces various challenges: nuclear brinkmanship by Russia and North Korea, nuclear expansion by China, and various horizontal proliferation risks. The safeguards provided by arms control treaties are steadily eroding. Meanwhile, an alternative and more radical arms control regime in the form of the TPNW challenges the existing regime built around the NPT.

The nuclear order needs revision to again enjoy the broad support among the international community that is needed to ensure nuclear stability and arms control. With great-power competition on the rise, this is difficult. Nevertheless, world leaders must make an effort, wherever possible, to reestablish a nuclear order that halts further proliferation and promotes arms control. This requires cooperation on these issues between the NPT nuclear-weapon states. It is especially critical here to build an incentive structure to convince China to create transparency regarding its nuclear arsenal expansion and engage in arms control discussions. If substantial reductions of nuclear arsenals are to prove unobtainable in the current geopolitical environment, nuclear powers should at least try and expand transparency and nuclear risk-reduction measures. Such measures could include a satellite non-interference treaty, ensuring parties' capabilities to observe each other's nuclear capabilities, as well as more active use of the Washington-Beijing military hotline.55 Reinvigorating arms control regimes may be difficult, but nuclear powers must nonetheless try. The likely alternative is unregulated arms races and further nuclear proliferation, with all the associated risks.



"We are here to defend the rules-based international order. The NPT is not just a piece of paper. It embodies some of the most fundamental commitments of humankind."56

Annalena Baerbock, German Foreign Minister, 10th NPT Review Conference, August 1, 2022

Key Points

1 The nuclear order is under increasing pressure.
As nuclear arms control regimes keep eroding, ever fewer safeguards are in place to prevent arms races and further nuclear proliferation.

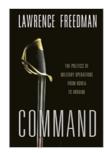
- 2 Russia's continuous nuclear threats and reckless attacks on nuclear power facilities in Ukraine pose a grave threat to the nuclear order. Not since the Cold War has a nuclear attack in Europe been such a realistic scenario as it is today.
- 3 As its nuclear arsenal continues to grow, China may soon become the third nuclear superpower, joining the United States and Russia. The nuclear arms control regime therefore needs to be extended, but China has thus far refused to accept restrictions.
- With intensifying great-power competition, rising geopolitical tensions, and increasing discontent with the NPT-based order in the "Global South," reinventing a nuclear order that ensures nuclear stability, fosters transparency and arms control, and enjoys broad global support is challenging. Nonetheless, the international community must do the maximum to achieve this objective.



Food for Thought

Food for Thought

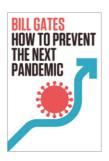
Books



Lawrence Freedman, Command: The Politics of Military Operation From Korea to Ukraine

Oxford: Oxford University Press, 2022.

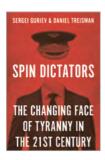
Freedman, the British *éminence grise* of war studies, details the intricate dynamics between commanders and politicians in modern wars. Covering wars from across the globe since 1945, his account underlines the often neglected importance of effective decision-making. Not least in the context of Russia's military blunders in Ukraine, this book is key to understanding how modern wars are fought.



Bill Gates, How to Prevent the Next Pandemic

New York: Knopf Publishing, 2022.

In his characteristic techno-optimism, Gates sets out a series of practical steps for preventing the next pandemic. Drawing on his experience with the Bill & Melinda Gates Foundation, he proposes creating a force of global pandemic experts to respond immediately to new outbreaks, improving vaccine manufacturing (even envisioning a universal vaccine against all sorts of viruses), holding regular pandemic drills, and enhancing pandemic surveillance and diagnostics.



Sergei Guriev and Daniel Treisman, Spin Dictators: The Changing Face of Tyranny in the 21st Century

Princeton, NJ: Princeton University Press, 2022.

"Spin dictators" have largely replaced "fear dictators," so the argument by Guriev and Treisman goes. Instead of resorting to large-scale violence, modern dictators aptly manipulate information to control society and weaken opposition, all under the guise of democracy. But the current struggles of authoritarian strongmen highlight the fragility of ideologically bankrupt regimes.



Chris Miller, Chip War: The Fight for the World's Most Critical Technology New York: Simon & Schuster, 2022.

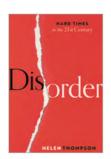
Miller recounts history since the 1960s through the prism of the battle over semiconductors, the key technology of our times. In his accessible and gripping account, Miller weaves together the roles of key individuals from Silicon Valley to Taiwan with a broader analysis of the centrality of semiconductors to the world economy and balance of power. As tensions over technology between the US and China heat up, this book is essential reading.



Kevin Rudd, The Avoidable War: The Dangers of a Catastrophic Conflict Between the US and Xi Jinping's China

New York: Public Affairs, 2022.

War between China and the US is not inevitable, argues Rudd, providing an antidote to deterministic doom. The former Australian Prime Minister and Mandarin speaker sketches ten future scenarios and suggests guardrails to manage the strategic competition. Above all, US and Chinese leaders must overcome their "mutually assured non-comprehension" of each other.



Helen Thompson, Disorder: Hard Times in the 21st Century

Oxford: Oxford University Press, 2022.

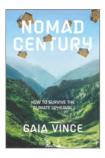
Fossil fuels might literally be relics of the past, but they continue to dominate global politics. Thompson, a Cambridge professor, tells the meta story of how energy is inextricably linked to the geopolitical, economic, and democratic disorders of the present day. The green energy transition, too, will be marked by geopolitical struggles as Europe and the US depend on China, which dominates the production and processing of critical minerals.



Natalie Tocci, A Green and Global Europe

Cambridge: Polity Press, 2022.

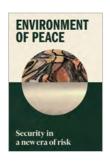
The European Green Deal could be the new *raison d'être* for the EU, according to Tocci. After a decade of manifold crises, the EU is in dire need of a new vision to regain both the support of European citizens and credibility abroad. But the green transition is deeply political. The leading scholar-practitioner argues that the EU therefore needs to deal with the socio-economic and geopolitical concomitants to make it a success.



Gaia Vince, Nomad Century: How to Survive the Climate Upheaval London: Allen Lane, 2022.

Set against the escalating climate crisis, Vince explains that global warming will render large swathes of the world uninhabitable. Rather than escaping from this reality, the environmental journalist and writer appeals, we must plan for the inevitable consequence: mass movements of people toward the North. She makes an optimistic case for devising a humane migration system, which seems daring given widespread nativism.

Reports



Richard Black et al., "Environment of Peace: Security in a New Era of Risk" Stockholm: SIPRI, May 2022, https://doi.org/10.55163/LCLS7037.

This report analyses the mutually reinforcing relationship between global warming and insecurity. Events such as droughts are multipliers of existing tensions in many parts of the world, while armed conflict damages the environment and renders environmental governance more difficult. We must fundamentally rethink the tenets of security policy, the authors argue, and include environmental resilience in fragile societies as a major security objective.



Rosa Balfour, Lizza Bomassi, and Marta Martinelli, "The Southern Mirror: Reflections on Europe From the Global South"

Brussels: Carnegie Europe, June 2022, https://perma.cc/27B2-SXMQ. The ambiguous responses by many countries in the "Global South" toward Russia's war on Ukraine caught many Europeans by surprise. This report helps understand Europe's lack of followership by surveying the views on Europe in seven countries in the "Global South." Highlighting the chasm between Europe's self-perception and reputation elsewhere, the report makes the case for a better understanding of other perspectives to strengthen Europe's soft power.



Chris Bradley et al., "On the Cusp of a New Era?"

New York: McKinsey Global Institute, October 2022, https://perma.cc/6LCC-34J4. This report captures the sense that the old order is dying, but the new one cannot yet be born. Following the "era of markets," the confluence of geopolitical tensions, rampaging inflation, and an energy crisis may mark a new era. Drawing on a wealth of data, this report imagines what this new era may look like in terms of the world order, technology, demography, energy, and macroeconomics, offering some cause for optimism.



Anthony Dworking and Mats Engström, "We'll Always Have Paris: How to Adapt Multilateral Climate Cooperation to New Realities"

Berlin: ECFR, October 2022, https://perma.cc/8WGY-K9QH.

Multilateral climate negotiations are beset by a lack of trust, geopolitical tensions, and economic crises that hinder ambitious cooperation. The underwhelming results of COP27 are a case in point, raising the question of whether the multilateral approach based on the Paris Agreement is ill-fated. This report recommends that the EU persist with collective approaches while pushing ambitious initiatives among smaller groups of states.



Ronja Ganster et al., "Designing Ukraine's Recovery in the Spirit of the Marshall Plan"

Washington, DC: GMF, September 2022, https://perma.cc/BKF6-7VBQ. 75 years after the original Marshall Plan for Europe, this report proposes a new Marshall Plan for Ukraine. Ravaged by Russia's indiscriminate attacks, Ukraine desperately needs help with rebuilding the country. The authors recommend that Europe and the US provide immediate relief, help reconstruct basic infrastructure, modernize the economy, and encourage EU accession.



Jacob Gunter and Helena Legarda, eds., "Beyond Blocks: Global Views on China and US-China Relations"

Berlin: MERICS, August 2022, https://perma.cc/4TYC-NX49.

While views on China as a systemic rival appear to be converging among the transatlantic allies, perspectives elsewhere in the world differ. Analyzing the positions of seven diverse countries, this report demonstrates that most do not want to choose sides. But China is intensifying its efforts to bring more countries into its fold, the authors warn, and Europe needs to take action to be a more attractive partner to countries in the "Global South."



Benjamin Larsen, "The Geopolitics of AI and the Rise of Digital Sovereignty"

Washington, DC: Brookings Institution, https://perma.cc/RJ5B-JS4Z. Once seen as a global agora, the digital ecosystem is splintering along ideological lines. Larsen shows that governance of artificial intelligence is emblematic of the technological decoupling between democracies and autocracies. While China and others use AI to surveil and control their populations, the EU and US, after initial disagreements, are starting to converge on a human-rights-centered approach.



Leslie Vinjamuri et al., "Building Global Prosperity: Proposals for Sustainable Growth"

London: Chatham House, December 2022, https://doi.org/10.55317/9781784135508.

The combined fallouts from the pandemic and Russia's war on Ukraine have caused a perfect storm in many developing economies. Covering sectors such as digital infrastructure, climate, and health, this report examines how to build back better and rejuvenate global development. Above all, the authors argue, stakeholders need to rebuild trust, which is the foundation of effective development cooperation.



NOTES

Quotations originally in British English have been adapted to American English.

Endnotes

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List of Figures

Possible deviations from a total of 100 percent in visualized data result from rounding.

1 Introduction: Re:vision

1.1 Examples of Russian war crimes in Ukraine, 2022

Illustration adapted by the Munich Security Conference based on data collected by the Victor Pinchuk Foundation and an illustration provided by the Pinchuk Art Center. According to Ukrainian law enforcement agencies, 79,415 crimes related to the aggression of the Russian Federation have been registered, among them: 62,095 crimes against the peace and security of mankind, and the international legal order (including 60,366 war crimes); 17,320 crimes against the national security fundamentals of Ukraine. Concerning war crimes against children, 2,405 criminal proceedings have been registered. Moreover, 71,308 objects of civil infrastructure have been destroyed or damaged. The armed forces of the Russian Federation carried out 179 strikes on 93 objects of the electric power industry of Ukraine. There were 69 attacks (38.6 percent) on 51 objects in October 2022. There were 31 attacks (17,3 percent) on 28 objects in November 2022. There were 45 attacks (25,1 percent) on 35 objects in December 2022. 916 cases of the use of prohibited means of warfare have been established.

1.2 Citizens' views on the invasion of Ukraine as a turning point in world politics, October–November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Do you agree or disagree with the following in light of Russia's invasion of Ukraine? – This is a turning point in world politics" respondents were given the following options: "strongly agree," "slightly agree," "neither agree nor disagree," "slightly disagree," "strongly disagree," and "don't know." Figures shown here combine the net responses agreeing and disagreeing, with the gray area representing the rest.

1.3 Escalating military intimidation of Taiwan by the Chinese People's Liberation Army (PLA), September 2020–December 2022

Illustration by the Munich Security Conference based on data provided by MERICS. MERICS research is based on reports of the Taiwanese Ministry of Defense (MoD). Data on the number of PLA aircraft entering Taiwan's air defense identification zone (ADIZ) and on the number of days with PLA aircraft entering Taiwan's ADIZ covers the period since the Taiwanese MoD has released regular reports. Data on the number of PLA aircraft crossing the median line in the Taiwan Strait covers the period since the first noticeable uptick in PLA activity in this space since 1999. According to MERICS research, before September 2020, there have been two aircraft crossing the median line in March 2019, three crossing in February 2020, and two crossing in August 2020.

1.4 Voting summary, United Nations General resolution on "The territorial integrity of Ukraine: Defending the principles of the Charter of the United Nations," October 12, 2022

Illustration by the Munich Security Conference based on the voting summary for resolution ES-11/4, adopted by the UN General Assembly on October 12, 2022, https://perma.cc/W6CM-LA9G. For the full text of the resolution see "Territorial Integrity of Ukraine: Defending the Principles of the Charter of the United Nations," A/RES/ES-11/4, October 12, 2022, https://perma.cc/A2RQ-V79J. Further note that the borders shown on this map are not intended to be exhaustive and do not imply official endorsement. Only UN member states are colored.

1.5 Evaluation of the response to Russia's invasion of Ukraine by citizens of different countries, share saying the country or organization has "done well" minus share saying it has "done badly," October–November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Thinking about the response to Russia invading Ukraine how do you think the following countries and organizations have done in their response to Russia?" respondents were given the following options: "very well," "quite well," "neither well nor badly," "quite badly," "very badly," and "don't know." Figures shown are the net of the total percentage for "well" minus the total percentage for "badly."

1.6 Citizens' views on whose rules they would prefer to live by, October–November 2022, percent Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Would you rather live in a world with international rules shaped mostly by...?" respondents were given the following options: "Europe," "US," "economically developing countries, such as countries in Africa (often known as the 'Global South')," "China," "Russia," and "don't know."

1.7. Citizens' preferences for their country's response to Russia, share saying that their country should oppose Russia minus share saying that their country should cooperate with Russia, October–November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "What do you think your country should do in response to the Russia as a military and economic power?" respondents were given the following options: "fully cooperate with Russia," "somewhat cooperate with Russia," "stay neutral," "somewhat oppose Russia," "fully oppose Russia," and "don't know." Figures shown are the net of the total percentage for "oppose" minus the total percentage for "cooperate."

1.8 Citizens' preferences for their country's response to the rise of China, share saying that their country should oppose China minus share saying that their country should cooperate with China, October–November 2022, percent

Illustration by the Munich Security Conference based on data provided by Kekst CNC. In answer to the question "What do you think your country should do in response to the rise of China as a military and economic power?" respondents were given the following options: "fully cooperate with China," "somewhat cooperate with China," "stay neutral,"

"somewhat oppose China," "fully oppose China," and "don't know." Figures shown are the net of the total percentage for "oppose" minus the total percentage for "cooperate."

1.9 Citizens' views on the main fault line in global politics, October-November 2022, percent

Illustration by the Munich Security Conference based on data provided by Kekst CNC. In answer to the question "What is the main fault line/division in global politics today?" respondents were given the options "democracies versus dictators," "countries that support a rules-based order and countries who don't," rich versus poor countries," "the West versus all other countries." "China versus the rest of the world." and "don't know."

1.10 Recent votes in the UN General Assembly, by regime type, percent

Illustration by the Munich Security Conference based on David L. Sloss and Laura A. Dickinson, "The Russia-Ukraine War and the Seeds of a New Liberal Plurilateral Order," *American Journal of International Law* 116:4 (2022), 798–809, https://doi.org/10.1017/ajil .2022.55.

1.11 Citizens' views on whether a country or group of countries has a vision for the global order, self-perception compared to the perception of others, October–November 2022, percent Illustration by the Munich Security Conference based on data provided by Kekst CNC. In answer to the question "Do the following have a vision for how they would like the international order to be run, or not?" respondents were given the following options: "a very clear vision," "a somewhat clear vision," "no vision," and "don't know." For the "US," "EU," "China," and "developing countries", the first figure shows the self-perception, and the second figure shows the averaged perception of all other countries polled. For "Russia," the figure only shows the perceptions of others. The countries included in the category "developing country" are Brazil, India, and South Africa.

Munich Security Index 2023

All illustrations and data in this section are based on the survey conducted by Kekst CNC. For the detailed method underpinning the index, see pages 40-41.

Explaining the Index

- 1. "Energy supply disruption" was not yet included in previous editions of the index. The Munich Security Index 2021 and the Munich Security Index 2022 thus covered 31 risks.
- 2. The answer scale is reversed to account for the natural direction of time. More imminent being sooner is closer on our answer scale and less imminent being later is further away on our answer scale, but we in fact want to give a higher score to risks that are more imminent hence we reverse.
- 3. The answer scale is reversed because higher answer scores for each of the five inputs should be associated with more serious risk. Without rescaling, it is exactly the reverse: high answer scores are associated with high risk preparedness and thus with less serious risk.

1.14 Citizens' perceptions of other countries, share saying country is an ally minus share saying country is a threat, October–November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "For each country/jurisdiction below, please say whether you think they pose a threat or are an ally to your country or neither [0-10, where 0 is 'threat,' 5 is neither and 10 is 'ally']." The scores run from a potential -100 (if 100 percent of a population said that x was a threat) to +100 (if 100 percent of a population said that x was an ally).

1.15 Perceptions of other countries as threats or allies, change between November 2021 and October–November 2022, group average

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "For each country/jurisdiction below, please say whether you think they pose a threat or are an ally to your country or neither [0-10, where 0 is 'threat,' 5 is neither and 10 is 'ally']." "Global" comprises all 12 countries surveyed, except Ukraine, which was not polled in the last round of the index. "G7" comprises Canada, France, Germany, Italy, Japan, the UK, and the US. "BICS" comprises Brazil, India, China, and South Africa. Fieldwork for the previous Munich Security Index, published in the Munich Security Report 2022 and used as a reference point here, took place in November 2021.

Spotlight Ukraine

1.16 Ukrainian citizens' views on whose rules they would prefer to live by, November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Would you rather live in a world with international rules shaped mostly by...?" respondents were given the following options: "Europe," "US," "economically developing countries, such as countries in Africa (often known as the 'Global South')," "China," "Russia," and "don't know."

1.17 Ukrainians evaluating whether they should carry on fighting or surrender in different scenarios, November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "In the following circumstances, do you think Ukraine should carry on fighting or surrender?" respondents were given the following options: "carry on fighting," "surrender," and "don't know."

1.18 Ukrainian citizens' views on acceptable ceasefire terms, November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "How acceptable would the following terms be for a ceasefire between Ukraine and Russia?" respondents were given the following options: "completely acceptable," "somewhat acceptable," "neither acceptable nor unacceptable," "somewhat unacceptable," "completely unacceptable," and "don't know." Figures shown here combine the net responses for acceptable and unacceptable, with the gray area representing the rest.

1.19 Ukrainian citizens' views on security arrangements after the war, November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Do you agree or disagree with the following ...?" respondents were given the following options: "strongly agree," "tend to agree," "neither agree nor disagree," "tend to disagree," "strongly disagree," and "don't know." Figures shown here combine the net responses agreeing and disagreeing, with the gray area representing the rest.

1.20 Ukrainian evaluation of the response to Russia's invasion of Ukraine of different countries and organizations, share saying the country or organization has "done well" minus share saying it has "done badly," November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Thinking about the response to Russia invading Ukraine how do you think the following countries and organizations have done in their response to Russia?" respondents were given the options "very well," "quite well," "neither well nor badly," "quite badly," "very badly," and "don't know." Figures shown are the net of the total percentage for "well" minus the total percentage for "badly."

2 Human Rights: Universell-Out

2.1 The growing impunity crisis, various indicators

Illustration by the Munich Security Conference based on data provided by the International Rescue Committee (IRC). The data on people in humanitarian need is based on acaps, "Humanitarian Access Overview," Geneva: acaps, July 2022, https://perma.cc/GJ74-8KV2. The data on civilian casualties is based on Monty G. Marshall and Benjamin R. Cole, "Global Report 2014: Conflict, Governance, and State Fragility," Vienna: Center For Systemic Peace, July 23, 2014, https://perma.cc/5VJP-U8W6. The data on aid workers is based on Abby Stoddard et al., "Aid Worker Security Report 2022: Collateral Violence," n.a.: Humanitarian Outcomes, August 2022, https://perma.cc/4R9R-FB6G. The data on attacks against health facilities is based on Safeguarding Health in Conflict Coalition and Insecurity Insight, "Unrelenting Violence: Violence Against Health Care in Conflict 2021," Baltimore: Safeguarding Health in Conflict Coalition and Insecurity Insight, 2021, https://perma.cc/XJ3B-3WVQ.

2.2 Chinese efforts to redefine international human rights standards, selected concepts promoted by Beijing

Illustration by the Munich Security Conference based on data provided by MERICS. MERICS research relies on the analysis of policy documents and statements of the Chinese Communist Party as well as on the Decoding China project developed with support of the China Media Project, Heidelberg University, and the Swedish Center for China Studies.

2.3 Voting coincidence with the EU on human rights votes in the UN General Assembly, 2021–2022, percent

Data and illustration provided to the Munich Security Conference by the European Council on Foreign Relations (ECFR), updating data in Richard Gowan and Franziska Brantner, "A Global Force for Human Rights? An Audit of European Power at the

UN," London: ECFR, Policy Paper, September 2008, https://perma.cc/Z2LP-ZDWK. The data covers the 76th session of the UN General Assembly (UNGA). "Human rights votes" refers to resolutions from the Third Committee of the UNGA, which deals with "Social, Humanitarian and Cultural" affairs. They include all votes on draft resolutions adopted by the Assembly in which the EU's members voted "in favour," "against," or abstained together. Resolutions on which the EU did not take a united position (of which there were six) were excluded from the analysis. The voting coincidence of non-EU members was calculated by dividing the number of votes cast by non-EU countries coinciding with the EU's positions by the overall number of votes, abstentions and no-shows of all non-EU countries on these resolutions. The evaluation of countries as free, partly free, and not free is based on Freedom House's country evaluations as documented in Freedom in the World 2022. The UN regional group "Western Europe and others" also includes Australia, Canada, Israel, New Zealand, and Turkey. The "not free" country in the "Western Europe and others" group is Turkey. Richard Gowan thanks Raquel Alberto De la Fuente for updating the figures.

3 Global Infrastructures: My Way or No Highway

3.1 Discriminatory trade interventions, per year and country

Illustration by Munich Security Conference based on "Global Dynamics: Total Number of Implemented Interventions since November 2008," St. Gallen: St. Gallen Endowment for Prosperity through Trade, December 2022, https://perma.cc/FM8Z-ZG86. When comparing current year activity to that of previous ones, the GTA recommends using snapshots of the GTA database taken on the same date within each year. The GTA dataset is a growing dataset as the GTA analysts continue reporting on years past. In this case, the cut-off date for this data is December 12th. That is, the dataset used here comprises the number of interventions recorded by December 12 of the respective year to ensure comparability.

3.2 Citizens' views on China having a greater say over the rules that govern international politics, October–November 2022, percent

Data and illustration provided to the Munich Security Conference by Kekst CNC. In answer to the question "Thinking about world politics. Do you agree or disagree with the following? It is a good thing if China has more say over the rules that govern international politics" respondents were given the following options: "strongly agree," "slightly agree," "neither agree or disagree," "slightly disagree," "strongly disagree," and "don't know." Figures shown here combine the net responses agreeing and disagreeing, with the gray area representing the rest.

3.3 Signatories of the Declaration for the Future of the Internet, April 2022

Illustration by Munich Security Conference based on "Declaration for the Future of the Internet," Washington, DC: US Department of State, April 2022, https://perma.cc/3GDE-XV56. The following signatories are geographically too small to display on the map: Andorra, Cabo Verde, Maldives, Malta, Marshall Islands, Micronesia, and Palau. Further note that the borders shown on this map are not intended to be exhaustive and do not imply official endorsement.

4 Development Cooperation: Strings Attached

4.1 The Group of Friends of the 2021 Global Development Initiative (GDI)

Illustration by the Munich Security Conference based on data provided by MERICS. The list of the Group of Friends includes all countries that have been verified to have taken part in one or more of the following meetings: virtual launch meeting of the Group of Friends of the GDI on January 20, 2022; high-level virtual meeting of the group on May 9, 2022; ministerial meeting of the group on September 20, 2022. Further note that the borders shown on this map are not intended to be exhaustive and do not imply official endorsement.

4.2 African views on which country provides the best model for development, 2019/2021, percent

Illustration by the Munich Security Conference based on Afrobarometer, "Analyse Online," n.a.: Afrobarometer, 2022, https://perma.cc/4B5R-CJFP. The data reflects the results of the 8th round of surveys (2019/2021), which covered 34 countries, including Benin, Burkina Faso, Mali, Tanzania, Ethiopia, Senegal, Nigeria, Côte d'Ivoire, Togo, Botswana, Guinea, Niger, Gabon, Sudan, Kenya, Cameroon, Zambia, Uganda, Mozambique, Malawi, Lesotho, South Africa, Tunisia, Ghana, Mauritius, Morocco, Gambia, Cabo Verde, Sierra Leone, Namibia, Angola, Zimbabwe, Liberia, and Eswatini. The category "former colonial powers" includes the United Kingdom, France, Portugal, and Germany. Afrobarometer conducts face-to-face interviews in the language of the respondent's choice.

4.3 Covid-19 vaccine doses supplied to the African continent by producing economy, millions

Illustration by the Munich Security Conference based on WTO and IMF, "WTO-IMF Covid-19 Vaccine Tracker," Geneva/Washington, DC: WTO/IMF, May 31, 2022, https://perma.cc/Y37Q-K4HE. The database was last updated on May 31, 2022. South Africa's "other supply" to the African continent comprises domestic supply and supply via the African Vaccine Acquisition Trust (AVAT). AVAT aims to secure vaccine doses to complement initiatives such as COVAX.

5 Energy Security: Refueled

5.1 Crude oil and natural gas imports to the EU and developing Asia, by origin and scenario, 2021, 2030, 2050, exajoules

Data and illustration based on "World Energy Outlook 2022," Paris: IEA, October 2022, https://perma.cc/6T2W-28SZ, figure 1.14, 54. The figures for 2050 were provided by Tae-Yoon Kim, Energy Analyst at the IEA. The Stated Policies Scenario (STEPS) describes how the energy system evolves when current policy settings are retained. The Announced Pledges Scenario (APS) illustrates how the energy system evolves when governments achieve all transition targets on time and in full. Developing Asia covers the Asia-Pacific regional grouping excluding Australia, Japan, Korea, and New Zealand. The Asia-Pacific regional grouping includes Southeast Asia (with Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam) as well as Australia, Bangladesh, North Korea, India, Japan, Korea, Mongolia, Nepal, New Zealand, Pakistan, China, Sri Lanka, Taiwan, and other Asia-Pacific countries and territories. The Middle East includes Bahrain, Iran, Iran, Iran,

Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen. North America covers Canada, Mexico, and the US.

5.2 Production and trade of hydrogen and derivatives for key regions and countries, by 2050, million tons

Illustration by the Munich Security Conference based on data provided by McKinsey & Company and based on the report "Global Hydrogen Flows: Hydrogen Trade As a Key Enabler For Efficient Decarbonization," Hydrogen Council and McKinsey & Company, October 2022, https://perma.cc/7NXQ-DA9U. The estimates are based on a net zero scenario (global temperature rise to 1.5 to 1.6 degrees above pre-industrial levels) and refer to hydrogen, ammonia, methanol, synthetic kerosene, and hydrogen used in green steel. Europe covers the EU, the United Kingdom, Norway, and Switzerland. The Gulf region includes Saudi Arabia, Oman, the United Arab Emirates, and Qatar. Latin America covers the Americas excluding the US, Canada, and Mexico. Chile accounts for most of Latin America's hydrogen exports. North Africa includes Libya, Morocco, Egypt, Algeria, and Tunisia. "Other African countries" covers all African countries not included in the category North Africa. Namibia and South Africa account for the net exports. Southeast Asia includes Thailand, Indonesia, Malaysia, Singapore, and Viet Nam.

5.3 Critical minerals supply chains, selected minerals and indicators

Illustration by the Munich Security Conference based on data from the IEA and the US Geological Survey. Data on the critical minerals needs for clean-energy technologies are based on "The Role of Critical Minerals in Clean Energy Transitions," Paris: IEA, May 2021, https://perma.cc/6W4R-SQRE, 45. The figures for the rise in demand were provided by Tae-Yoon Kim, Energy Analyst at the IEA, and have been updated by the IEA in the context of the report "World Energy Outlook 2022," Paris: IEA, October 2022, https://perma.cc/6T2W-28SZ. Note that the rise in demand is calculated by weight. The data on the top three countries in mining is based on "Mineral Commodity Summaries 2022," Reston, US Geological Survey, 2022, https://doi.org/10.3133/mcs2022. The data on the top three countries in processing is based on "Share of Top Three Producing Countries in Total Processing of Selected Minerals and Fossil Fuels, 2019," Paris: IEA, 2019, https://perma.cc/S3TM-L86F.

6 Nuclear Order: Atomized

6.1 Growth of China's nuclear arsenal, 2010-2021, number of warheads

Illustration by the Munich Security Conference based on data published by Hans M. Kristensen, Robert S. Norris, and Matt Korda in the Bulletin of the Atomic Scientists and SIPRI Yearbook. For the data on 2010, see Robert S. Norris and Hans M. Kristensen, "Chinese Nuclear Forces, 2010," *Bulletin of the Atomic Scientists* 66:6 (2010), 134–141, https://doi.org/10.1177/0096340210387046, 139. For the data on 2011, see Hans M. Kristensen and Robert S. Norris, "Chinese Nuclear Forces, 2011," *Bulletin of the Atomic Scientists* 67:6 (2011), 81–87, https://doi.org/10.1177/0096340211426630, 85. For the data on 2012, see Robert S. Norris and Hans M. Kristensen, "Nuclear Pursuits, 2012," *Bulletin of the Atomic Scient* 58:1 (2012), 94–98, https://doi.org/10.1177/0096340211433025, 96. For the data on 2013, see Hans M. Kristensen and Robert S. Norris, "Chinese Nuclear Forces,

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6.2 Nuclear missile silos in China, 2022

Illustration by the Munich Security Conference based on articles published by Hans M. Kristensen, Matt Korda, Scott Lafoy, Decker Eveleth, Rod Lee, and Joby Warrick, For the data on the pre-2019 silos at PLARF Bases 63 and 66 see Hans M. Kristensen and Matt Korda, "Chinese Nuclear Forces, 2020," Bulletin of the Atomic Scientists 76:6 (2020), 443-457, https://doi.org/10.1080/00963402.2020.1846432, 448-450. For the data on the newly discovered suspected missile silos at PLARF Base 66 see Scott Lafoy and Decker Eveleth, "Possible ICBM Modernization Underway at Sundian," n.a.: Arms Control Wonk, February 5, 2020, https://perma.cc/8H57-HK3Z. For the data on the suspected silos at the Jilantai training area, see Hans M. Kristensen, "New Missile Silo and DF-41 Launchers Seen in Chinese Nuclear Missile Training Area," n.a.: Federation of American Scientists, September 3, 2019, https://perma.cc/BD6E-WAAN; Hans M. Kristensen, "China's Expanding Missile Training Area: More Silos, Tunnels, and Support Facilities," n.a.: Federation of American Scientists, February 24, 2021, https://perma.cc/E7FY-QJGH. A suspected silo was first discovered at the Jilantai training area by Hans M. Kristensen in September 2019. In February 2021, he discovered 15 more in the same area. For the data on the suspected silos at the Yumen missile silo field see Joby Warrick, "China Is Building More Than 100 New Missile Silos in its Western Desert, Analysts Say," The Washington Post, June 30, 2021, https://perma.cc/BDA2-2EXJ. For the data on the

suspected silos at the Hami missile field see Matt Korda and Hans M. Kristensen, "China Is Building a Second Nuclear Missile Silo Field," n.a.: Federation of American Scientists, July 26, 2021, https://perma.cc/P65T-WG7Y. For the data on the suspected silos at the Ordos missile silo field see Rod Lee, "PLA Likely Begins Construction of an Intercontinental Ballistic Missile Silo Site Near Hanggin Banner," n.a.: China Aerospace Studies Institute, August 12, 2021, https://perma.cc/4HKF-RSSQ. Please note that the boundaries shown on this map are not intended to be exhaustive and do not imply official endorsement.

6.3 Global nuclear order, 2022

Data and illustration provided to the Munich Security Conference by Felix Lemmer from the Centre for International Security at the Hertie School. For data on which states possess nuclear weapons see Hans M. Kristensen and Matt Korda, "World Nuclear Forces," in: Stockholm International Peace Research Institute (ed.), SIPRI Yearbook 2022: Armaments, Disarmament and International Security. Stockholm: Stockholm International Peace Research Institute, 2022, 341-432, https://perma.cc /4L53-L2SF, 342. For data on which nuclear weapon states are party to the NPT see UN Office for Disarmament, "Treaty on the Non-Proliferation of Nuclear Weapons," UN Office for Disarmament Affairs, July 1, 1968, https://perma.cc/VU5Z-ZH4A. For data on nuclear weapon host states see Hans M. Kristensen and Matt Korda, "United States Nuclear Weapons, 2022," Bulletin of the Atomic Scientists 78:3 (2022), 162-184, https:// doi.org/10.1080/00963402.2022.2062943, 176. For data on which states are under or soon to be under a nuclear umbrella see NATO, "NATO Member Countries," NATO, August 31, 2020, https://perma.cc/C76T-WPU8; NATO, "Accession Talks and Signature of the Accession Protocols of Finland and Sweden," Press Release, July 4, 2022, https:// perma.cc/N6ES-QKZD; National Museum Australia, "ANZUS Treaty," Australia National Museum, September 19, 2022, https://perma.cc/J5Y5-B4US; Ministry of Foreign Affairs of Japan, "Treaty of Mutual Cooperation and Security Between Japan and the United States of America," Washington, DC: Ministry of Foreign Affairs of Japan, January 19, 1960, https://perma.cc/9VYV-RFGT; U.S. Department of State Bureau of Political-Military Affairs, "U.S. Security Cooperation With Korea," U.S. Department of State, January 20, 2021, https://perma.cc/TQ4N-XHCR. For data on which states are part of a Nuclear Weapon Free Zone or are party to the TPNW, see UN Office for Disarmament Affairs, "Treaty on the Prohibition of Nuclear Weapons," New York: UN Office for Disarmament Affairs, July 7, 2017, https://perma.cc/F75D-FMJK; UN Office for Disarmament Affairs, "Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean," New York: UN Office for Disarmament Affairs, February 14, 1967, https://perma.cc/P83Z-UF2G; UN Office for Disarmament Affairs, "South Pacific Nuclear Free Zone Treaty," New York: UN Office for Disarmament Affairs, August 6, 1985, https://perma.cc/42R3-4QRW; UN Office for Disarmament Affairs, "Treaty on the Southeast Asia Nuclear Weapon-Free Zone," New York: UN Office for Disarmament Affairs, December 15, 1995, https://perma.cc/94N2-8S9K; UN Office for Disarmament Affairs, "African Nuclear Weapon Free Zone Treaty," New York: UN Office for Disarmament Affairs, April 11, 1996, https://perma.cc/CGE6-VJBQ; UN Office for Disarmament Affairs, "Treaty on a Nuclear-Weapon-Free Zone in Central Asia," New York: UN Office for Disarmament

Affairs, September 8, 2006, https://perma.cc/ASR6-FLRH. Please note that the boundaries shown on this map are not intended to be exhaustive and do not imply official endorsement.

6.4 Nuclear status, 2022

Data and illustration provided to the Munich Security Conference by Felix Lemmer from the Centre for International Security at the Hertie School. In addition to the sources used for Figure 6.3, the graphics rely on data from the R package Rnaturalearth that stems from the year 2017 to calculate the population of the states in each category.

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List of Abbreviations

APS	Announced Pledges Scenario
ASEAN	Association of Southeast Asian Nations
BRI	Belt and Road Initiative
CCP	Chinese Communist Party
CO2	carbon dioxide
COP27	27th Conference of the Parties to the United Nations Framework
	Convention on Climate Change
COVAX	Covid-19 Vaccines Global Access
CRMs	critical raw materials
DSR	Digital Silk Road
EU	European Union
EVs	electric vehicles
G7	Group of Seven of the world's advanced economies
GDI	Global Development Initiative
FOCAC	The Forum on China-Africa Cooperation
IEA	International Energy Agency
IMF	International Monetary Fund
INF Treaty	Intermediate-Range Nuclear Forces Treaty
IRA	Inflation Reduction Act
ITU	International Telecommunications Union
JCPOA	Joint Comprehensive Plan of Action (Iran nuclear deal)
LICs	low-income countries
LMICs	low- and middle-income countries
LNG	liquefied natural gas
MSC	Munich Security Conference
MSI	Munich Security Index
MSR	Munich Security Report
NATO	North Atlantic Treaty Organization
New IP	New Internet Protocol
New START	New Strategic Arms Reduction Treaty
NPT	Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty)
NWFZ	Nuclear-Weapon-Free Zone
ODA	Official Development Assistance
OPEC	Organization of the Petroleum Exporting Countries
OPEC+	group of 23 oil-producing countries, consisting of OPEC and non-OPEC member
PGII	Partnership for Global Infrastructure and Investment
PLA	People's Liberation Army
REEs	rare earth elements
STEPS	Stated Policies Scenario
TPNW	Treaty on the Prohibition of Nuclear Weapons
TTC	EU-US Trade and Technology Council

MUNICH SECURITY REPORT 2023 LIST OF ABBREVIATIONS

UDHR Universal Declaration of Human Rights

UN United Nations

UNHRC United Nations Human Rights Council

US United States

WFP UN World Food Programme
WHO World Health Organization
WTO World Trade Organization

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Isabell Kump and Leonard Schütte, "Dark Clouds Over the Black Sea: A Readout From the Munich Leaders Meeting in Bucharest in November 2022"

Munich: Munich Security Conference, Munich Security Brief 4, December 2022, https://doi.org/10.47342/VJZB9052.

In late November 2022, the MSC held its first formal meeting in Southeastern Europe – the region most affected by Russia's war on Ukraine. This Munich Security Brief summarizes the discussions centering on support for Ukraine, the Black Sea region, and the implications of the war for the European security architecture. It includes an updated edition of the "Transatlantic To-Do List."



Tobias Bunde and Sophie Eisentraut, "Zeitenwende for the G7: Insights From the Munich Security Index Special G7 Edition"

Munich: Munich Security Conference, Munich Security Brief 3, June 2022, https://doi.org/10.47342/JDIE4364.

As survey data collected for a special edition of the Munich Security Index shows, Germany is not the only country where people perceive the Russian invasion of Ukraine as a *Zeitenwende* – a turning point. This Munich Security Brief discusses the momentous changes in public opinion in the G7 countries and provides an overview of the challenges facing the G7 in a security environment shaped by both traditional and nontraditional security risks.



Randolf Carr and Julia Hammelehle, "Building a Transatlantic To-Do List: A Readout From the Munich Leaders Meeting in Washington, DC, in May 2022"

Munich: Munich Security Conference, Munich Security Brief 2, May 2022, https://doi.org/10.47342/TGHT8654.

Following the Russian invasion of Ukraine, the transatlantic partners showed remarkable unity. Building on this transatlantic momentum, the discussions at the Munich Leaders Meeting in Washington, DC, highlighted the need to develop joint responses to the *Zeitenwende*. This includes a multitude of challenges beyond Russia. Maintaining unity, investing in the strength of democracies, and deepening global partnerships will be vital. This Munich Security Brief summarizes the discussions at the Munich Leaders Meeting and the ambitious "Transatlantic To-Do List" that emerged from them.

MUNICH SECURITY REPORT 2023 LATEST PUBLICATIONS



Sophie Eisentraut, "Unity in a Time of Upheaval: A Readout From the Munich Security Conference 2022"

Munich: Munich Security Conference, Munich Security Brief 1, February 2022, https://doi.org/10.47342/JMVD4331.

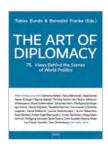
Overshadowed by the growing threat of a major military conflict in Eastern Europe, last year's Munich Security Conference occurred at a particularly critical moment for European security and international peace. Nonetheless, as the Munich Security Report 2022 had hoped for, the political leaders present in Munich actively fought the impression of collective helplessness in the face of the "Russia crisis" and many other overlapping conflicts. This Munich Security Brief summarizes the conference's key takeaways.



Tobias Bunde, Sophie Eisentraut, Natalie Knapp, Randolf Carr, Julia Hammelehle, Isabell Kump, Luca Miehe, and Amadée Mudie-Mantz, "Munich Security Report 2022: Turning the Tide – Unlearning Helplessness"

Munich: Munich Security Conference, February 2022, https://doi.org/10.47342/QAWU4724.

A mounting tide of crises that reinforce each other is threatening to overwhelm our societies and political systems. The Munich Security Report 2022 explores the emergence of a sense of "collective helplessness" in the face of a plethora of global challenges, and stimulates the debate on how it can best be overcome.



Tobias Bunde and Benedikt Franke (eds.), The Art of Diplomacy: 75+ Views Behind the Scenes of World Politics

Berlin: Econ, 2022, ISBN 978-3-430-21077-5.

In this book, renowned companions of Wolfgang Ischinger – including several current and former heads of state and government – reflect on basic questions of diplomacy on the occasion of his 75th birthday. Taking the reader behind the scenes of diplomacy, they reveal their most astonishing experiences, successes, and failures on the diplomatic stage, and outline their ideas for the diplomatic handling of unresolved challenges.

MUNICH SECURITY REPORT 2023 ABOUT

About

About the Munich Security Conference (MSC)

The Munich Security Conference is the world's leading forum for debating international security policy. In addition to its annual flagship conference, the MSC regularly convenes high-profile events around the world. The MSC publishes the annual Munich Security Report and other publications on specific security issues.

About the Munich Security Report (MSR)

Since its first edition in 2015, the Munich Security Report (MSR) has compiled data, analyses, and maps to illustrate current security policy issues. The annual flagship report serves as a discussion starter for the Munich Security Conference in February and is targeted at an expert audience as well as the interested public. Special editions of the MSR offer deeper analyses of key actors, regions, or issues.



MUNICH SECURITY REPORT 2023 ABOUT

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Tobias Bunde, Sophie Eisentraut, Natalie Knapp, Leonard Schütte, Julia Hammelehle, Isabell Kump, Amadée Mudie-Mantz, and Jintro Pauly, "Munich Security Report 2023: Re:vision," Munich: Munich Security Conference, February 2023, https://doi.org/10.47342/ZBJA9198.

DOI: 10.47342/ZBJA9198 ISSN (Print): 2365-2179 ISSN (Online): 2365-2187

Debates about different visions for the future international order are often abstract and theoretical. By invading Ukraine, Russian President Vladimir Putin has made the clash of competing visions a brutal and deathly reality. The world's liberal democracies are awakening to the challenges posed by autocratic revisionists, and have taken the first important steps to pushing back. But for liberal-democratic principles to prevail over the autocratic variants, democracies must revamp their vision of a desirable international order. A re-envisioned liberal, rules-based international order is needed to strengthen democratic resilience in an era of fierce systemic competition with autocratic regimes. But to make this vision more attractive among the wider international order, democracies must also take into account legitimate criticism and concerns among the wider international community.

Tobias Bunde, Sophie Eisentraut, Natalie Knapp, Leonard Schütte, Julia Hammelehle, Isabell Kump, Amadée Mudie-Mantz, and Jintro Pauly, "Munich Security Report 2023: Re:vision," Munich: Munich Security Conference, February 2023, https://doi.org/10.47342/ZBJA9198.