UNITED NATIONS UNIVERSITY
Centre for Policy Research

GOVERNING UNCERTAINTY

DR ADAM DAY and DR DAVID PASSARELLI

Dr Adam Day is Director of Programmes and Dr David Passarelli is Executive Director at United Nations University Centre for Policy Research.

Ministry of Defence

This report was commissioned by the UK Ministry of Defence's Development, Concepts and Doctrine Centre (DCDC).

March 2021

ISBN: 978-92-808-6536-3

Adam Day and David Passarelli, *Governing Uncertainty* (New York: United Nations University, 2021).

Table of Contents

SECTION 1

Executive Summary

This report surveys major trends that will shape the future of global governance over the next 30 years. It maps trends in society, politics, technology, security and the environment, and considers how the interplay across these sectors impact traditional and new development actors in their efforts to deliver a transformative development agenda centered on social inclusion, shared prosperity, safety and environmental sustainability.

The 2030 Development Agenda provides a natural backdrop for this report. The ambitions, objectives and challenges that marked negotiation of the Sustainable Development Goals reflect the complexity of international cooperation in the modern age. A line is drawn from the negotiations of the global development agenda at the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012 to present-day challenges. The report finds that many core societal risks – inequality, debt, mistrust, environmental and technological change, and the important role of non-State actors – persist today and have grown in importance following the outbreak of COVID-19.

While not a central focus of the report, the global health pandemic does highlight the fragility of multilateral cooperation, resource imbalances, and how these two factors destabilize the economic, political and military balance of power, particularly in fragile regions. The current *development emergency* speaks to these challenges and our shared reality today: the pandemic is jeopardizing the full range of development objectives and forcing difficult trade-offs across the world. States confronted with rapidly shrinking fiscal space are rethinking alliances and global engagement in an effort to secure the resources required for national development, security, and the health and wellbeing of their citizens. These developments introduce uncertainty in the practice of development and demand a reconsideration of engagement models with the world's most vulnerable communities, as they are the first to turn to new resource providers.

The trends and changes outlined in this report are tied to a specific set of political and economic decisions and influences that marked the decades since the end of the Cold War. Setting the scene early in the report, attention is drawn to the globalization of economies and the impact of liberal trade and regulation policy on economic development and the distribution of wealth within and across States over three decades. These policies enabled rapid technological innovation, specialization through global value chains, poverty reduction and wealth generation in many parts of the world. However, this prosperity has not been equally distributed, leading to unequal development outcomes felt most acutely in the developing world and by global youth who will be forced to grapple with the intergenerational consequences of a worsening development emergency.

Using the methods of foresight research, the report extrapolates possible future scenarios based on three cross-cutting trends (technological change, environmental change, demographic change and human mobility) and three megatrends (loss of trust in institutions, judicialization of governance, stakeholder activism). An integrated and systematic analysis of these trends results in four projections that will impact global governance, as well as security and development outcomes over the next 30 years:

1. **Inequality will continue to grow, undermining the legitimacy of global institutions:** Inequality is a significant driver of violent conflict and a key contributor to the high rates of relapse of many fragile countries attempting to emerge from decades of conflict. It also presents a major risk to social stability, democratic governance and development ambitions. If calls for meaningful structural change are not accommodated by governments and institutions that mediate the bulk of global trade, finance, taxation, technology, and industry, the authors project a significant erosion of their legitimacy over the coming decades and greater insecurity.

2. **The diffusion of centres of power will create uncertainty and drive new conflict risks:** Security and development outcomes will be shaped by a more diverse group of State and non-State actors not easily managed by traditional forms of statecraft. This poses a challenge to traditional approaches of global governance that rely on a broad respect for State sovereignty, State actors, large intergovernmental forums, and liberal values. Managing risks in this environment will be more complex given the rapid addition of new players and the multiplication of pathways for influence and disruption. There is a great deal of uncertainty over the global power landscape, limiting the ability of international institutions and liberal governments to keep populist and xenophobic tendencies at bay.

3. **Strategic litigation will empower non-State actors and challenge State authority:** The role of judicial and quasi-judicial institutions will expand in a range of important areas, including climate, land, and labour rights, as well as sanctions and debt restructuring. This will empower non-State actors to use the judiciary to advance rights claims, gradually shifting power away from States and legislators to litigants, judges, and courts. This turn to the judiciary is fuelled in part by the view that domestic and international courts can serve as a force multiplier, generating critical momentum for change, unburdened by the short-termism of electoral politics and other competing interests.

4. **Technology will continue to drive rapid, highly unequal advances in development:** The fourth industrial revolution will reshape development trajectories, accelerating development for some and offering new opportunities for growth, while locking out others. There is greater understanding of the transformative economic potential of technology than ever before but also the ways in which technology can undermine trust and safety in both developed and fragile democracies. From Washington to Hanoi, Addis Ababa to Guatemala City, interference in the digital commons, most often through hacking and disinformation, is fomenting scepticism of the national and global institutions that safeguard the public interest. A critical mass of powerful governments seem to be trending in unproductive directions – a race to erect protective walls in digital spaces to retain both the offensive and defensive advantages that new technologies bestow, and to privatize its transformative economic potential.

In the broadest sense, global governance refers to a purposeful order that brings together different actors – domestic or international, private or public, formal or informal – to develop, promulgate, and enforce norms, processes, as well as formal and informal agreements for a common good.[1] In this report, the authors consider the role of local governments, judiciaries, the financial sector, and other non-State actors, as well as intergovernmental organizations and States in global governance, and the way each shapes cooperation within and across State boundaries. Changes witnessed in the form, frequency and forums of engagement signal a shift away from traditional approaches to statecraft, diplomacy, and traditional forms of multilateral cooperation. And while it is impossible to say with certainty what this means for the future of global governance in 30 years, the authors formulate ten assumptions about the future, upon which three long-term pathways are developed at the end of the report.

1. In the short term, economic (and likely political) inequality will continue to increase, putting greater numbers into extreme poverty while, at the same time, putting pressure on labour markets to deliver decent work.

2. With more limited concessional finance for developing countries, private finance and investment will become more important determinants of development implementation capacity.

3. Wealthy countries will continue ageing, while poorer ones will continue to have younger median populations. This will lead to an expanding youth bulge in many regions already experiencing violent conflict.

4. More people will migrate. The promise of greater safety, resources and opportunity will remain the key driver of global migration flows, with cities and urban centres being the primary destination for migrants.

5. Climate change will contribute to a range of risks, from massive displacement in low-lying areas, large-scale loss of livelihoods, and desertification as well as contributing to an accelerated urbanization trend worldwide. Affected governments will not have the resources to address the consequences on their own.

6. Technology will be one of the most powerful vectors of change as internet penetration increases and the digital commons expands. This will carry costs, notably in relation to the protection of individual, government, and corporate data, while also revealing meaningful differences in the quality of life across the world. It will also carry benefits, though it is unclear if these will be equitably shared.

7. Information campaigns will play a major role in how States compete for influence, including by conflict actors using disinformation and AI-driven programmes.

8. In many parts of the world, the judiciary will play an increasingly important role in assigning responsibility and obligations in the context of sustainable development, challenging the role of States and legislators.

9. Civil wars will be sustained via a combination of transnational illicit networks and involvement of outside actors, making them tend to last longer than wars over the previous 30 years.

10. Non-State actors will continue to play a vital role in sustaining armed conflict, complicating traditional forms of peacemaking. Global jihadist groups will remain a significant source of instability in parts of Asia, the Middle East, and Africa.

Taking these trends into account, this report identifies three pathways to describe what the world might look like if it moves toward greater isolationism, regionalization, or networked multilateralism.

A turn toward greater isolationism will result in a rejection of long-standing models of economic prosperity and expanding globalization. This environment will nurture nationalist tendencies and encourage localization and self-reliance. Austerity measures put in place to cope with the long-term effects of the global pandemic, and greater national spending will lead to dwindling public resources for international development initiatives. The UN is faced with a difficult operating environment and has fewer financial resources at its disposal, which forces a dramatic reduction of the arenas in which it is a central player in global governance, notably a significant withdrawal from conflict resolution. Further reform of the Organization is hampered by nationalist agendas that tend to prevent change. This turn away from multilateral engagement results in fewer internationally agreed rules, and a proliferation of non-binding principles that are largely thought to be toothless and unable to diminish the extremely high risks of large-scale inter-State conflict.

A second pathway may see major powers reducing their global ambitions, focusing instead on building regional spheres of influence to sustain future growth in order to meet the needs of their populations. Regional blocks will have specific beneficial effects. They will facilitate geographically limited regulatory and standard-setting, which boosts investor confidence and shores up the absorptive capacity of developing countries. Crisis response, migration and refugee management and protection, development needs, and security all benefit from new regional understandings that move beyond minimum global commitments in these areas. The UN's role in shepherding bold, global commitments will be diminished owing to the growing importance of regional strategies and alliances, even if it benefits from strengthened partnerships with regional actors, like the Association of Southeast Asian Nations (ASEAN), Southern African Development Community (SADC), and Economic Community of West African States (ECOWAS), on a bilateral basis.

A third possible pathway will lead to a form of networked collective engagement, or networked multilateralism. Major powers find common ground on the most serious global challenges and make effective use of the UN to broker new global standards, and in the process elevating perceptions of the Organization's effectiveness and strategic utility. With this as a foundation, the multilateral system becomes less of a State-centred competitive marketplace and more of a networked set of institutions, people and processes. Partnership opportunities become unmoored from geographic territory and significant pooled funds are set aside to manage global shocks. Domestically, States will still struggle to defend their legitimacy and authority given the rise of competing and complement governance actors (civil society, judiciaries, the private sector). By 2050, the multilateral system looks more like a spider's web than a 38-story building. Its strands stretch from the global to regional to local levels, capable of responding at scale to major shocks. It has strong tendencies towards decentralization of power, though is able to take decisions quickly and with the legitimacy that comes by tapping into significant portions of the globe.

SECTION 2

Introduction

This report examines the broad development and security trends that are influencing the trajectory of global governance today, anticipating how those trends will play out over the coming 30 years, through to 2050. Specifically, the report maps: (1) changes and challenges to global governance approaches and institutions, (2) cross-cutting and megatrends that are accelerating change, and (3) how these trends will shape long-term development and security outcomes. This approach recognizes that security and development are interconnected aspects of a global system and that a specific focus on each area is helpful in identifying key trends and potential entry points for policymakers. Sections 3 through 5 explore development themes, while Sections 6 and 7 take up conflict and security themes. The final section offers some future scenarios based on upon different responses by the multilateral system.

DOMAINS OF CHANGE	CROSS-CUTTING TRENDS	MEGATRENDS
Development	Technological change	Loss of trust in institutions
Governance	Environmental change	Judicialization of governance and development
Security	Demographic changes and human mobility	Stakeholder activism

Anticipating the immediate future is difficult – the next 30 years is impossible to predict with accuracy. Indeed, the COVID-19 pandemic is an obvious example of the type of shock that can dramatically disrupt prognoses of the future.

This report adopts the methods of foresight research to extrapolate possible future scenarios from available data to better contextualize questions about the future. This is in keeping with the purpose of foresight research, which is to provide users with a forward view of societal change. This effort is made easier by focusing on *game changing* disruptive forces (individuals, entities, or processes) that can significantly alter trend lines, reorienting development and governance trajectories. Foresight research ensures decision makers are equipped to develop policy alternatives tailored to the turbulence, challenges, and opportunities of a highly interconnected world.

2.1 The road travelled

The 2030 Agenda for Sustainable Development (also, Sustainable Development Goals or SDGs) is the only globally agreed development framework and, consequently, it serves as the backdrop for this report. The 2030 Agenda reflects the collective aspirations of governments, articulated during a time of significant upheaval caused by a synchronized downturn in the global economy. When leaders met at the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012 (Rio+20) to launch the planning process that would lead to the SDGs, global headlines were still devoting space to the aftershocks of the economic crisis of 2008. The recovery was, according to then International Monetary Fund (IMF) Chief Strauss-Khan, fragile and slow-moving.[2]

Economic liberalization, especially from the 1990s onward, was responsible for creating significant wealth, including in Africa, which saw its fortunes rise during the period 1998 to 2008, and in China, which made the greatest contribution to global poverty reduction during the period of the Millennium Development Goals (MDGs), even though certain forms of inequality within the country increased over the same period.[3] These gains were the product of accelerated economic globalization, which featured notable increases in trade, exports, financial integration, and international capital mobility, as well as the expansion of global value chains (GVCs).

While liberal economic policy delivered unparalleled efficiency in the markets, it also contributed to the worst levels of global inequality since the Second World War, and weakened global governance institutions that were neither able to prevent regulatory arbitrage, nor curb the risk-taking behaviours evidenced in many financial centres in the lead up to the global economic crisis.[4] Risky lending and trading practices that came to light during the 2008 economic crisis also revealed significant deficiencies in the global financial system. Global economic growth lifted millions out of poverty, reducing inequality between countries on traditional measures, while also exacerbating absolute inequality globally and inequality within many countries.[5] When leaders gathered in Rio, they faced popular discontent and hostile electorates that demanded a grand reimagining of economic policies and dominant development approaches.

It is tempting to think back on the launch of the 2030 Sustainable Agenda as a moment of great optimism, but this would grossly misrepresent the challenges faced by the global community at the time. Reporting on the outcomes of the UN Conference in Rio, *The New York Times* offered a sobering assessment: "the United Nations Conference on Sustainable Development ended here as it began, under a shroud of withering criticism."[6] There was a clear-eyed view that development policies up to that point had failed to deliver inclusive development, and mediating institutions that form a key part of the rules-based international system (RBIS) remained resistant to meaningful structural change. Take, for example, the plan to establish an international tax body within the UN system that would be responsible for monitoring and discouraging damaging borrowing practices as well tax avoidance by multinational corporations. The creation of such a body represented a significant challenge to the status quo: it would have displaced the Organisation for Economic Co-operation and Development (OECD) and G20 countries, resituating the discussion on global taxation in a more inclusive forum with greater opportunities for developing country participation. The international tax body was never established. At the time of the UN Conference in Rio, when these plans were discussed, developing country debt stocks stood at 140 per cent of combined Gross Domestic Product.[7] As of 2020, this has increased to close to 200 per cent of combined GDP, a record high, with lending by private creditors now constituting the fastest-growing component of debt for developing countries.[8]

Youth and civil society organizations were especially active and vocal in their criticism of global institutions and dominant political economy approaches to development during this period. The economic outlook in 2012 predicted greater penalties for the young including higher unemployment, lower wages, and a significant loss of earnings over the lifetime for those aged 16-24, deepening intergenerational inequalities that were already manifesting.[9] Youth were joined by civil society actors, arguing that the pattern of growth must matter more than the pace of growth.

To address the 2008 economic crisis, USD 3 trillion was made available by G20 economies to protect the global financial system. This unprecedented action – swift and boasting the participation of many global economies –was seen as a watershed moment for global governance, one that many had hoped would spark new faith in the multilateral system.[10] While the effectiveness of the G20 was celebrated, a notable part of global publics perceived the 'bail out' of the financial system as excessive corporate welfarism – a bargain which involved removing value from the public system to enrich a few in global finance. The United Nations warned at the time that the growing inequality trends *amid plenty* threatened to "unravel the fabric that keeps society together."[11]

Governments that participated in voluntary reviews ahead of the Rio+20 conference recognized that a major impediment to realizing sustainable development ambitions was the gap between aspiration and capacity, the commitments expressed by governments versus their ability to implement them.[12] The SDGs leave more room for partnership with both civil society and the private sector – far more than either was offered in the MDG framework. The multilateral system, including international financial institutions (IFIs), as well governments vowed to integrate and partner with the private sector and civil society to overcome these capacity deficits in an effort to achieve inclusive global governance and development.

Mark Carney, former Governor of the Bank of England, summarized these trends elegantly, drawing a neat line from the financial crisis in 2008 to the 2030 sustainable development ambitions. He noted that the global financial crisis was both a crisis of values, as well as value, the product of markets evolving away from the businesses and households they serve. He observed that markets can distort value and corrode values and that the SDG agenda is best served when the dynamism of the private sector puts value in service of values.[13] Present-day governance and development trends can be tied back to this idea: governments alone cannot sustain the transformational change required to safeguard the future of humanity. The very clear implication is that the future of global governance and development will be shaped by new actors, in new forums, and in novel ways.

The adoption of the 2030 Agenda for Sustainable Development in 2015, in spite of all the aforementioned challenges and frictions, constituted a significant milestone in development. A global 15-year transformation plan was agreed by UN Member States, with significant input and stewardship from African leaders (as opposed to MDGs which were largely shaped by OECD countries). And it came on the heels of other major global commitments to international development. The Third International Conference on Financing for Development (FFD3) concluded only a few months prior and gave rise to the Addis Ababa Action Agenda (AAAA), a detailed global framework for development finance through 2030 with the explicit goal of *turning billions* in official assistance *into trillions* through additive non-Official Development Assistance (ODA) sources, like private finance, remittances, and the recuperation of funds lost to illicit financial flows. An immediate pledge from IFIs committed USD 400 billion to advance the global development agenda (albeit short of the USD 3 trillion estimated to be required to realize the 17

SDGs). These SDG and AAAA commitments stand as landmark achievements by the global community.

2.2 Key drivers of change

This report highlights four key drivers of change that will shape global governance and development outcomes over the coming three decades.

Inequality will continue to grow, undermining the legitimacy of global institutions[14]

Abhorrent levels of inequality persist in and across modern societies despite years of coordinated action by governments and global institutions. Evidence from multidimensional studies of poverty, human development, and livelihoods attest to ever-widening disparities in income and human development outcomes, as well as significant variance in the capacities of individuals and States to address and overcome sudden health, climate, or economic shocks. Inequality presents a major risk to social stability, democratic governance and development ambitions. As the authors of the 2018 World Inequality Report noted: “if rising inequality is not properly monitored and addressed, it can lead to various sorts of political, economic, and social catastrophes.”[15]

Inequality affects populations in upper-middle income, lower-middle income, and low-income countries—it is not strictly a problem of the developing world. Inequality permeates societies from the Global North to the Global South with significant in-country variation.

The Global Multidimensional Poverty Index provides three figures that illustrate this point[16]. In 2019:

- 94 million multidimensionally poor people lived in upper-middle-income countries, where the subnational incidence of multidimensional poverty ranged from 0 per cent to 69.9 per cent;

- 792 million multidimensionally poor lived in lower-middle-income countries, where the subnational incidence of multidimensional poverty ranged from 0 per cent to 86.7 per cent;

- 440 million multidimensionally poor people lived in low-income countries, where the subnational incidence of multidimensional poverty ranged from 0.2 per cent to 99.4 per cent.

While a number of countries were on track to achieve reductions in their multidimensional poverty scores, COVID-19 has put these once-optimistic trajectories in jeopardy. And inequality trends are expected to worsen before they improve, posing a major risk to multilateralism and the institutions of global governance. UN Deputy Secretary-General Amina Mohammed has warned that “grievances and inequalities are deepening, eroding trust in authorities and institutions of all kinds, and increasing vulnerabilities.”[17] It is clear that recovery from COVID-19 will require significant institutional transformations and, owing to worsening inequality trend lines, calls for institutional reform will remain a feature of the global governance landscape over the medium term.

As discussed later in this section, growing inequalities are a significant driver of violent conflict, and indeed a key contributor to the high rates of relapse of many fragile countries attempting to emerge from decades of conflict. Here, the links between developmental trends and conflict risks are especially important.[18]

If calls for meaningful structural change are not accommodated by governments and institutions that mediate the bulk of global trade, finance, taxation, technology, and industry, it is likely to lead to significant erosion of their legitimacy. Global governance actors like the G20 once celebrated as a model of effective multilateralism, have been slow to signal a commitment to meaningful transformation. The last G20 Leaders communiqué in 2018 offered only a tepid recognition of the negative externalities of liberal economic policy and unbridled globalization:

> "We welcome the strong global economic growth while recognizing it has been increasingly less synchronized between countries and some of the key risks, including financial vulnerabilities and geopolitical concerns, have partially materialized."[19]

The current push for greater responsiveness from powerful States and global institutions to address rising levels of inequality coincides with a low ebb in multilateralism. One view is that the multilateral system is weathering a storm that will pass.[20] Another is that a shift is underway from a multipolar world order with a dominant Western bias to competitive unilateralism. Leading powers are deploying ultimatums (or what has been called *politics of withdrawalism*)[21] more frequently than comprise. This form of assertive multilateralism is perhaps best exemplified by the former US Administration's withdrawal from the Paris Accord and the World Health Organization, though those moves have now been reversed. The long-term consequences of these strategies are still unclear but they will undoubtedly foment doubt and scepticism of the staying power and sustainability of international bodies and the RBIS, even if once recalcitrant powers decide to rejoin.

For decades, the multilateral system has been substantively shaped by Western powers and their allies. But recently, these traditional powers have become more circumspect in their support for global institutions. This stands in stark contrast to the period of multilateral innovation that inspired the creation of new international bodies and the expansion of existing global institutions – from the humanitarian and peacekeeping sector, to trade, and global health, global powers partnered with *middle powers* to promote global cooperation in the period immediately following the Cold War.[22] The diplomatic toolkit in a world of competitive unilateralism will be deployed to advance national objectives over international ones, informed more by enlightened self-interest than by any ethic of mutual aid or sense of a common, shared future. It will open new paths for States that espouse alternative value systems and competing visions of rights and development. Rising global powers will use the ossification of established powers in the global arena as political capital in a campaign to reshape the institutions of global governance.

Navigating power relationships in the international arena requires that States be able to use and resist power.[23] Few are resilient enough in the post-pandemic environment to effectively reshape global institutions and amongst those that are, not all align with a Western liberal view of development and global governance. It is difficult to imagine a scenario in which the global community will come together in the coming decade to deliver the reimagined 'global social contract' that several international leaders are now calling for.[24]

Inequality is a major risk to the legitimacy of global institutions and will remain a stubborn feature of the development landscape for the foreseeable future as national governments turn inward and focus on national economic recovery while seeking influence in international bodies to support national priorities. Indeed, as Sections 6 and 7 will explore, rising inequality will also present significant risks of violent conflict and undermine the chances for sustainable peace in a wide range of settings.

The diffusion of centres of power will create uncertainty and drive new conflict risks

The vision of world order that dominated much of the globe since the end of the Cold War appears to be drawing to a close. The rough military balance amongst great powers, coupled with nuclear deterrence and a broad respect for sovereignty, is being replaced with a "multipolar" world in which power is distributed far more broadly across a range of State and non-State actors, many of which are not easily managed by traditional forms of statecraft. This has been paralleled by a decline in the centrality of liberal tenets of global governance, evidenced by the recent rise of authoritarianism and national protectionism, a retreat from multilateral institutions, and growing levels of distrust in institutions around the world.[25]

As global centres of power become more diffuse, new stresses and uncertainties are arising with direct implications for international peace and security. Managing the risks of armed conflict will necessarily be more complex and difficult in a world where the traditional sources of authority – e.g. great powers and the UN Security Council – are neither willing nor able to exert their influence. Buoyed by technologies that have already created a far more interconnected world, a range of non-State actors including multinational corporations, violent extremist groups, and individual citizens can cause far more change – and create far more risks – than ever before. Indeed, the very uncertainty over the global power landscape itself creates risks of escalation, as actors look for advantages in a period of flux.

Today's conflicts have become more intractable and less conducive to traditional peace settlements due to several interrelated factors: the increasing importance of non-State actors, a rise in prominence of violent extremist groups, expanding influence of transnational criminal networks, and the willingness of regional and international players to intervene directly in internal wars. As a result, peace settlements are more elusive, tend to be less stable, and increasingly result in relapse.

Conflict trends are interacting with economic, geopolitical and environmental changes today. As argued in the previous driver of change, global growth has become increasingly uneven, concentrating wealth and contributing to deeper political and economic inequalities that fuel resentment and drive conflicts.[26] Sporadic and unequal growth has generated shocks, such as the Arab Spring, while also fuelling populist and nationalist sentiments in many parts of the world. Similarly, as will be discussed in a subsequent driver of change, new technologies have accelerated change in nearly every sector, driving economic growth and creating a far more interconnected global society. But new technologies are spurring even greater gaps between rich and poor, offering exponential growth to those States and communities able to invest in technology while leaving others even further behind. Technologies have other dark sides as well: echo chambers of xenophobia and racism are now amplified into open unrest by AI-driven technologies; violent extremist groups are able to recruit from a global audience on social media, and; powerful actors are now racing to control the technologies that will harness enormous power in the near future.[27]

Here, the risks of direct great power confrontation appear just as likely to play out via cyberwarfare as on the physical battlefield. If the past 30 years witnessed a growth in non-State forms of violent conflict, the coming 30 may witness a return of inter-State competition over new technologies amidst a worrying decline in the ability of multilateral institutions to curb the proliferation of weapons of mass destruction (WMD).

Climate change is already acting as a risk multiplier to violent conflict and is set to play a far more direct role in global risks in the near future. Changing weather patterns and erratic rainfall are increasingly contributing to crop failure and loss of livelihoods, driving up tensions over scarce resources, shifting the patterns of pastoralists, and driving large-scale population movements. Environmental change is also accelerating urbanization, driving conflicts over land, and causing new stresses between States. There is mounting evidence that climate-driven sociopolitical dynamics are increasing the risks of violent conflict, with a very high likelihood of much more dramatic change soon.

While there is a great deal of uncertainty, weak economic growth is likely to persist (especially in the immediate post-pandemic period), non-State actors will continue to grow in importance, and climate change will cause more severe weather, higher sea levels, and loss of livelihoods in a wide swathe of the world.

Strategic litigation will empower non-State actors and challenge State authority

When one thinks of global governance, one typically thinks of State actors coming together to agree on common rules that will govern national and transnational activities. This view overlooks the role of courts, notably domestic courts, in global governance. Domestic judicial systems play a role that is complementary to, not a substitute for, other global governance institutions. But they can also diminish the role and authority of States, legislatures and their leaders. When cooperative arrangements between States fail or fall short of expectations, States and non-State actors have, among other strategies, turned to the judicial system to advocate for change. A 2018 survey by the Open Society Justice Initiative found that “strategic litigation is on a steep upward trajectory.”[28] Working in concert, strategic litigation through domestic and international courts can serve as a force multiplier, generating critical momentum for change, unburdened by the short-termism of electoral politics and other competing interests.

Domestic courts are already involved in regulating transnational activity, however, their role in transnational judicial governance has largely gone unnoticed. One function of domestic courts in global governance lies in the judicial determination of rights and obligations of transnational actors, a form of transnational public law litigation.[29] This is litigation where private individuals and businesses, government officials, and nations sue one another directly in a variety of judicial forums, including in domestic courts, drawing on both domestic and international law.[30] Declarations by domestic courts are powerful and can shape norms, international law, as well as national and global governance.

An expansion of the role of judicial and quasi-judicial institutions is occurring in a range of important areas, including climate, land, labour rights, sanctions and debt restructuring. This phenomenon matters for global governance because, pursued in the extreme, it can shift power away from States and legislators to litigants, judges, and other non-State actors. An influential study by the American Political Science Association in 2001 observed that “citizens with lower or moderate incomes speak with a whisper that is lost on the ears of inattentive government officials, while the advantaged roar with a clarity and consistency that policymakers readily hear and routinely follow.”[31] It is this perceived failure of commitment and responsiveness that will make judicial remedy an increasingly important feature of the global governance landscape.

Examples of the judicialization of global governance are more numerous today than they were a decade ago. In October 2020, a Canadian-headquartered mining company entered into a settlement in a Canadian lawsuit alleging torture and slavery at its subsidiary's Eritrean mine. In the Netherlands, *Friends of the Earth Netherlands* attempted to force a Dutch-headquartered oil company to reduce its CO2 emissions to specific targets. And in the last decade, private creditors have been able to use domestic courts to influence sovereign and subsovereign debt restructurings, constraining the efficacy of multilateral approaches to debt alleviation. The transnational reach of domestic law is perhaps most evident in the area of climate litigation. This will be discussed further in Section 5 in connection with new forms of stakeholder activism.

Current trends suggest that domestic judicial systems will become more important over the coming decades owing to two complementary shifts: (1) a renewed focus on burden-sharing and the allocation of duties and responsibilities for sustainable development; and (2) a growing rights consciousness (notably in the area of climate change) that will motivate individuals and non-State stakeholders to explore and employ new mechanisms to influence States and, through them, global governance institutions and development trajectories. The judicialization of global governance will be driven by an increase in rights-claiming activities from the bottom up and, importantly, the growing number of private sector actors and interests engaging in the funding or implementation of development activities.

Technology will continue to drive rapid, highly unequal advances in development

Technology is being deployed in unprecedented ways – holding governments, public authorities, and citizens accountable for their actions, as well as helping governments prepare, avoid and respond to crises by leveraging new data and improved telecommunications. The fourth industrial revolution may also create new income streams for developing countries with limited access to capital or concessional finance through new approaches to data centralization, management and control. Indeed, there is greater understanding of the transformative economic potential of technology than ever before. It is widely assumed that digital innovations will help developing countries leap-frog slow and costly stages of development and, for this reason alone, it is important to encourage greater access to, and more participation in, the digital commons.

However, the very same technologies that hold the promise of rapid socioeconomic development are also being weaponized to undermine the legitimacy of governments around the world, eroding trust between people and their representatives. The UN High Commissioner for Human Rights has warned that the very systems upon which our economic and social lives depend may be simultaneously instrumentalized to undermine them.[32] From Washington to Hanoi, Addis Ababa to Guatemala City, interference in the digital commons, most often through hacking and disinformation, is fomenting scepticism in the national and global institutions that safeguard the public interest. The risk of rapid technological development is not only that it will lead to winner-take-all industry giants, but that these corporate actors lack the capabilities and incentives to expand digital access in safe, equitable and responsible ways.

The multilateral system is struggling to keep up with the pace of change. It must rise to the challenge of simultaneous climate, health, and debt crises while also developing, testing and agreeing to digital standards that safeguard individual and national safety in a period of rapid digitalization. Ideally, these would also ensure equitable access to intellectual property and fair distribution of the financial proceeds of the fourth industrial revolution. For example, there is still disagreement on both the appropriate forum and form of taxation that should apply to the digital economy, which is reopening old wounds between the world's leading economies and emerging and developing ones. The tug of war over taxation principles persists – only every day of disagreement today costs far more than it did in 2015.[33] The daily profits in the digital economy are staggering, but so are the losses to the public purse. Disheartened by the lack of global coordination on this issue, and replicating a trend observed in other multilateral efforts, many countries are going it alone, establishing national digital taxation regimes.

The security opportunities and threats of rapid technological development are well documented. As noted above, a critical mass of powerful governments seem to be trending in unproductive directions – a race to erect protective walls in digital spaces to retain both the offensive and defensive advantages that new technology bestows, and to privatize its transformative economic potential. Technology lends itself just as readily to conflict as to peace, as detailed below. The multilateral system has yet to demonstrate that it is able to shift global attitudes to technology decisively toward the latter.

2.3 Summary

COVID-19 has forced a global reckoning. Governments and many global institutions acknowledge that the investments required to create resilient societies are lacking. All attention is now focused on recovery, or *building forward better*, using this a once in a lifetime, generational opportunity to shift relationships with the planet, its ecosystems and each other by making intelligent, joined-up investments.

Industry and business are part of the solution, but they will require a clear signal from political leaders pointing the new direction to ensure investments are timely, strategic, and complementary to public investment. This requires a transparent global recovery strategy that is endorsed by States and global institutions working in partnership with the private sector and civil society. The alternative is a turn inward, which will fuel further nationalist sentiment, erode multilateral cooperation, and lead to uneven regional recovery. Should the latter pathway prevail, adaptation measures to cope with future shocks will be more invasive, more disruptive, and ultimately cost more lives.

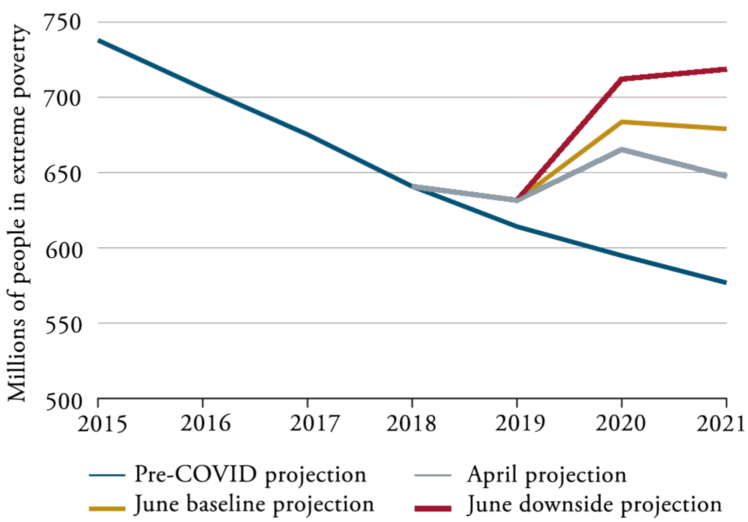
The next sections of this report consider the state of global development, community transformation, key challenges to States, as well as the changing nature of conflict over the next 30 years. These sections address systemic risks to development, global governance and security through the lens of specific sectoral issues. The arguments set out later in this report point to a set of challenges that are already straining the multilateral system well beyond its current structures and capacities. How the international community responds will be of crucial importance to the future of RBIS and global governance. Will we continue along the path of greater isolation and withdrawal from multilateral responses to global challenges, or will we build the kind of networked multilateralism that reflects the highly interconnected set of risks facing us today?

SECTION 3
The Development Emergency

In early 2020, several months after the global spread of COVID-19 began, both the UN Secretary-General, António Guterres, and the UN Deputy Secretary-General, Amina Mohammed, began speaking of an "unprecedented development emergency" brought on by the pandemic. They cautioned that this threatened to undo hard-won development gains, pulling millions of people back into extreme poverty and exacerbating the unequal distribution of resources in and across societies.[34]

This was not their first warning. Taking stock of development progress in 2019, the Secretary-General appealed for "dramatic action" to correct a development trajectory that was woefully off-track: the global community was expected to overshoot the target to eliminate global poverty by 42 years (to 2072), gender inequality by 59 years (to 2089), and also fall short on most environmental sustainability targets.[35]

Figure 1: Effects of COVID-19 on Global Poverty Rates



Source: Mahler et al. (2020)[36]

Early assessments of the impacts of the current global health crisis validate the dire warnings issued by the UN's most senior leadership. The UN expects emerging market and developing economies will register their first output contraction in more than 50 years, leading to negative per capita income growth in 2020 and 2021; the global recession is projected to lead to the first rise in global extreme poverty since 1998 (the best current estimates suggest that 87 per cent of the extreme poor will be in sub-Saharan Africa); and the first decline in human development has been observed since measurements began in 1990.[37]

Additionally, historic levels of unemployment are being recorded. The International Labour Organization estimates that the global decline in work hours between the fourth quarter of 2019 and the second quarter of 2020 amounted to a loss of more than 300 million full-time jobs – and greater deprivation. It is estimated that 1.52 billion children and youth are currently out of school or university, representing 87 per cent of the world enrolled school and university student population. A quarter of these are also missing out on school meals which exacerbates food insecurity, prevalent in both developed and developing countries.[38] While the crisis is causing an immediate roll-back of development gains – notably in the areas of women's rights, education, food and social security, and health care – it will cast a long shadow on global development efforts for years to come.

Indeed, even more severe than the economic setbacks brought on by the COVID-19 pandemic (estimated at USD 375 billion a month)[39] is the long-term systemic fragility that is likely to result. COVID-19 is undercutting momentum across a range of development goals, forcing difficult choices with respect to resource allocations that will trigger reinforcing feedback loops with externalities that are not yet fully understood. Figure 2 below illustrates some of the interconnected challenges and unexpected benefits (e.g. reduced carbon emissions) triggered by the pandemic.

The challenge and opportunity of COVID-19 can be observed through efforts to achieve universal health coverage (UHC), a key determinant of global resilience.[40] Important progress was being made toward UHC in the pre-pandemic period. Immediately before the COVID-19 outbreak, in September 2019, the UN hosted the first-ever UN High-Level Meeting on Universal Health Coverage, testament both to the growing global momentum to achieve SDG 3 (Good Health and Wellbeing) and the enduring need for health services. While UHC had been improving, the trendline in 2019 projected that five billion people would still be without healthcare by 2030, significantly undermining preparedness for future pandemics, the likelihood of which the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) assessed as very high: "Without preventative strategies, pandemics will emerge more often, spread more rapidly, kill more people, and affect the global economy with more devastating impact than ever before."[41]

The global community was already struggling to meet the health care needs of high-risk populations – among others, migrants, asylum-seekers and those living in concentrated underserved areas or working in the informal sector – most of whom reside in countries where debt accumulation outpaced national income growth before the crisis. In some regions, like the Gulf, the State is responsible for providing health insurance for migrants only in a very limited number of cases. In other cases, it is the responsibility of employers or left ambiguous.[42] COVID-19 has demonstrated that the status quo in healthcare coverage will undermine future resilience. The coming decade will be marked by low growth in most countries, which will have an outsized impact on countries that already struggle to meet the needs of high-risk populations. Since domestic resources are unlikely to meet the growing UHC needs, and borrowing will become increasingly difficult (see next section), a combination of novel insurance solutions and concessional finance may be required to close the protection gap.

The current trend of decreasing development cooperation may leave the populations with the least domestic fiscal space with fewer pathways out of the health crisis and fewer resources to address critical social protection needs, like health care. The IMF and World Bank are supporting the Debt Service Suspension Initiative (DSSI) that will help alleviate part of the debt burden for DSSI-eligible countries, but this will not free up sufficient resources to underwrite the economic stimulus required to reverse development losses, achieve UHC, and lay the foundation for resilient futures. Without additional concessional investments, debt restructuring that takes into consideration long-term debt servicing burdens and private credit, and new insurance solutions, other development goals will be jeopardized. Consider the link between health care and poverty. There is no realistic way for the global community to eradicate global poverty without addressing UHC. Expenses related to health services are estimated to push 100 million people into extreme poverty every year, while trillions more are attributed to lost productivity.[43] There are enormous economic benefits to be reaped from improved approaches to health care and public investment more generally, and this will require both investments in capacity and the capacity for investment.

Figure 2: COVID-19 Impacts across the SDGs

Source: UN DESA (2020)

3.1 Economic change and social development during and after recovery

Systematic economic change is required to realign development ambitions with capacity – the very problem highlighted at the Rio+20 conference in 2012. This section considers economic policy as both a boon and barrier to sustainable, inclusive development and COVID-19 recovery.

An IMF analysis of growth narratives based on a set of 4,620 country reports between 1978 and 2019 found that there was a common *growth recipe* across all global income groups (low-income countries, emerging markets, advanced markets) which included a mix of the following ingredients: privatization, transparency, infrastructure and education. These growth recipes were supported by progressive liberalization policies, which valued high-skilled workers, exports, and GVCs, and encouraged trade and manufacturing efficiencies. GVCs in particular are meant to promote participation by developing countries in global trade but are, in practice, often dominated by firms in high-income countries that exercise monopolistic control, sometimes locking developing country partners into low value-added activities. This has led to unrestrained bargaining power for some corporations, rent-seeking behaviours, and has generally exerted downward pressure on labour (wages).[44] The aggregate efficiency of GVCs has, to date, been valued greater than the distributive effects that disguise the adverse impacts on groups who may be left worse off.[45]

Recent research finds that monopolistic practices in GVCs have exacerbated personal income inequality – they have not produced the kind of uplift that was expected from economic globalization, which was meant to encourage local innovation, structural transformation, and support the upskilling of labour that could feed into other national industries. The aggregative impacts of liberal economic policy have been widely celebrated, but while lifting millions out of poverty it has also led to mass environmental damage and reinforced exploitative labour practices around the world.

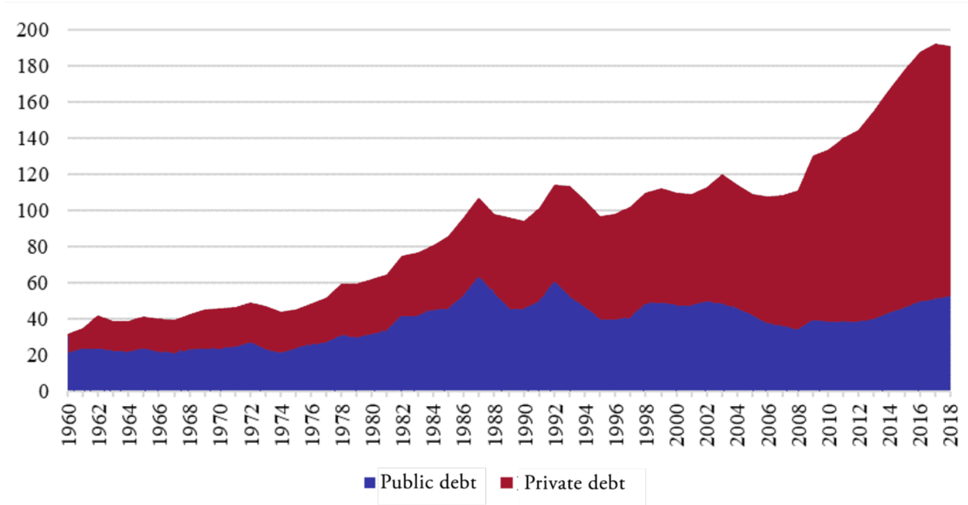
There is widespread acknowledgement that reduction of inequalities will depend on actions and events that are both exogenous to countries (e.g. financialization, trade globalization, technical change) and endogenous to them (e.g. investments in public services and social protection, labor market policies, taxation and wealth distribution).[46] The next section considers the role of debt as an important constraint on inclusive development prospects.

3.2 Debt

A dramatic increase in borrowing is putting development ambitions at risk and is very likely to constrain the development options of future generations in heavily indebted States. Official lenders (traditionally the Paris Club, but also China more recently) are themselves now more heavily indebted than ever before. This new accumulation of debt, the result of COVID-19 relief stimulus, has happened so rapidly that finance ministries are puzzling over the long-term impacts at home. But it is the rapid accumulation of debt in developing countries that is one of the most significant disruptive economic changes observed today. Current borrowing trends are undermining long-term public investments, including in public health and competitiveness and this is likely to worsen in the coming decade as debt to private international bondholders comes due.

The problem lies not only with the amount of debt accumulating (see Figure 3, below) and the inability of many countries to pay these obligations, but also the changing landscape of creditors that is multiplying risks for debtor countries (and lenders – there is a chronic lack of transparency, which has led to important data gaps that make it very difficult to know how much debt a country has actually incurred, how much is collateralized, and who owns the debt). This problem has become more acute as increasingly complex private debt instruments displace traditional official creditors. Private debt also generally carries higher interest rates (costing more to the borrower) and shorter maturities (insulating private lenders from some risk). And as private creditors overtake official lenders, the latter's ability to comprehensively address debt risks will diminish.

Figure 3: Developing country total debt as a per centage of Gross Domestic Product



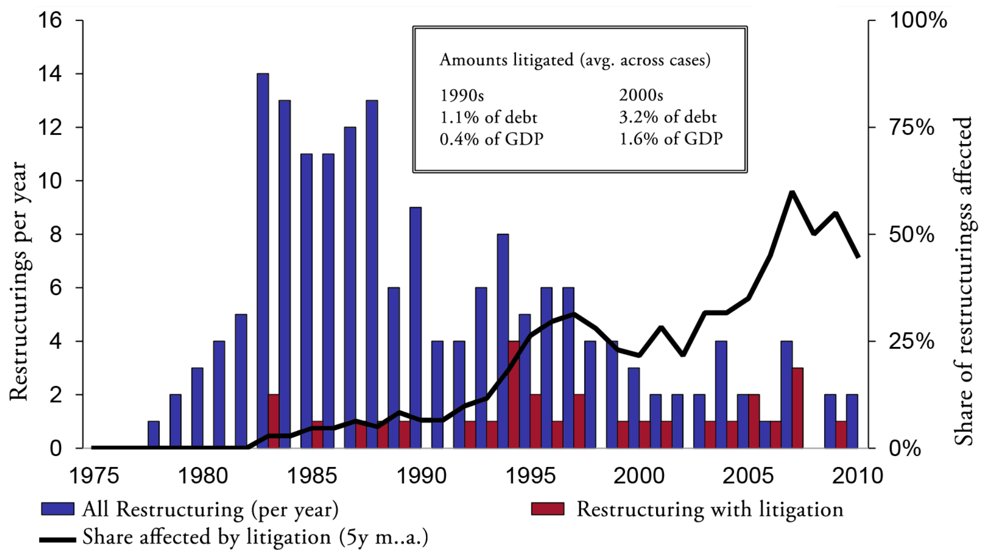
Source: United Nations Conference on Trade and Development (2020)[47]

The IMF calculates that the number of countries in debt distress doubled between 2013 and 2019 and spent, on average, 110 per cent more on debt service payments in 2019.[48] Current estimates point to a fivefold increase in global debt by 2025.[49] Worryingly, research suggests that borrowing continues even when it is known that repayment is unlikely and the probability of default is high.[50] While some of this official debt can be restructured through official bilateral or multilateral channels, much of the new debt is owed to private creditors that may refuse to cooperate with multilateral debt restructuring or forgiveness initiatives and who can force debt resolutions that undermine SDGs. The Overseas Development Institute points out that a significant share of borrowing has been on international bond markets and because these obligations underwritten by foreign law, courts are more likely to uphold creditors' rights.[51]

These trends give rise to specific concerns. First, official lenders may find that official lending and concessional finance are used to cover repayments to private creditors as the portion of private debt surpasses public official debt. Second, private creditors may prove less flexible, resist debt restructuring and cooperation with official lenders and, instead, seek resolution in the courts – lending further credence to the observation in this report that judiciaries will play an increasingly important role in global governance over the coming decades. Research by the European Central Bank confirms a growing trend of sovereign debt litigation, illustrated in Figure 4 on the following page.

Finance on concessional terms will be increasingly difficult to access in the post-COVID period. Yet significant investment is still required to achieve the SDGs in developing countries if *no one is to be left behind*. Consider the needs of agribusiness in Africa, a sector that accounts for approximately 70 per cent of employment on the continent. The African Development Bank estimates that less than 3 per cent of current lending goes to support this sector.[52]

Figure 4: Debt litigation trends



Source: Schumacher et al. / ECB and VoxEU (2018)[53]

Increases in regional trade, while still small in comparison to regional trade in Asia and Europe, may prove a boon to development ambitions in Africa and provide revenue streams that ease the pressure on public finance. Trade is at the heart of the development plan for Africa 2063, and the African Continental Free Trade Area (AfCFTA) is a major step in leveraging trade for development on the African continent. AfCFTA is expected to increase the continent's GDP by 7 per cent by 2035. The AfCFTA is a timely measure that can support economic recovery, arresting economic losses from diminished output, joblessness, accumulating debt, and the depreciation of African currencies. It will require both a great deal of compromise and diplomacy over the coming decade to reap the benefits of a common African trade agenda.

An idea was much discussed by development economists and policy practitioners prior to the adoption of the SDGs: that inequality of outcomes matter as much as inequality of opportunity. Liberal economic policies are founded on the premise that globalization improves opportunities. This overlooks the crucial fact that neither States nor individuals benefit from equal starting points.[54] The SDGs offer space for greater intervention to ensure equality of *outcomes* – it is also SDG 10.3.[55] It is perhaps time to revisit the long-standing view that market efficiency will provide a sustainable pathway to inclusive development. The International Institute for Strategic Studies (IISS) argues that multilateral organizations that set global economic trade rules are presented with an opportunity today which, if squandered, will cost them credibility "on a key issue for the rising generation" which "may turn to more direct action against commercial and government targets".[56]

3.3 Outlook

As concessional funding shrinks, developing and emerging economies will turn to credit and private investment, notably from new industry titans, until AfCFTA trade benefits begin to flow. In Africa, private investments will be directed principally in energy and technology infrastructure until

2030, increasingly from investors on the continent and the "halo effect" created by recent momentum sparked by the likes of Aliko Dangote in Nigeria.

Debt transparency, forgiveness, and restructuring required to capacitate growth in low-income and middle-income countries will be sluggish in the 2020s owing to the number and diversity of creditors and lack of the right incentives to induce collaboration. Despite calls from the IMF and World Bank for debt relief for debt-distressed countries and countries at risk of debt distress, limited debt forgiveness will take place through 2030 with growth stalling in major creditor nations.

The Bretton Woods institutions will come under significant pressure to work with the Paris Club – a group of creditor countries established more than six decades ago that establishes rules for sovereign debt relief – and private lenders to address lending practices and tackle the downward trend in official development aid, which pushed many countries to take on private debt. The accumulation of debt will increasingly be seen as a threat to global stability, which will attract the attention of the Security Council and lead to support for an immunity shield protecting assets in highly-indebted countries from seizure.

Debt relief will improve in 2030, when China and creditors in the Paris Group begin collaborating more closely on debt transparency. China may decide to join the Paris Club, picking up on an earlier proposal made by the People's Bank of China for full membership in the Paris Club, as creditor countries come under pressure to harmonize and agree to greater transparency in lending practices in the face of accumulating sovereign debt.[57]

Debt sustainability will be a watchword in New York, London, Paris and Beijing. After several years of inactivity, the US will secure authorization from Congress to appropriate funds for debt relief and use the Paris Club to constructively engage China on finance for development and relief for heavily-indebted nations. This closer collaboration will allow debtor nations to restructure a considerable portion of their official debt, moving away from loan-by-loan evaluations to bulk restructurings.

The likely drop in concessional finance between 2020-2030 will have forced many developing countries into weak bargaining positions with private creditors and technology giants, skewing available capital to profitable industries, as private investors likely retreat from low-interest markets in high-income countries. This will negatively impact public investment in agriculture in Africa where soil erosion will be a major impediment to crop yields. Further, pressure from private creditors will force borrowers to seek greater efficiencies in the agricultural sector through automation, which will trigger significant job losses in the sector by 2030. However, the presence of major technology players in Africa will help create a critical mass of research and innovation, a boon to the mobile technology industry.

By 2030, many developing countries will have traded privileged access to new, largely untapped consumer markets for private capital investment to upgrade infrastructure.[58] By 2035, regional trade integration and market diversification will have helped shift away from a dependency on commodity exports, enabling some indebted countries to create more fiscal space in national budgets. There will be a new sense of urgency to achieve greater national and regional self-sufficiency, owing to greater scepticism of globalization and GVCs.

Extensive study of the COVID-19 response will prompt more public investment in technology infrastructure in the mid-2020s and by 2030, mass regional data storage capacities will emerge. Regional data protection mechanisms will be put in place by greatly limiting the analytic capacities of international technology firms reliant on big data as a result. Around 2030, rifts will emerge over the storage, use, and trade of consumer data collected by foreign technology partners. This data will be monetized to offset the cost of infrastructure projects, providing new resources for African economies. By 2040, African mobile bank innovations will be a leading export, bolstering the continent's credentials as a technology hub.

Liberal economic policy will not lose its place or pre-eminence. The need for new technologies to tackle climate change will continue to drive innovation and high-skilled labour mobility—largely to high-income economies and centres of excellence in Africa, where research funding, living standards and environmental conditions prove conducive to building up research and innovation hubs. Gradually, developing countries will leverage improved data capabilities to lure members of the diaspora back to local labour markets (see Section 4). China will concentrate on domestic innovation, reducing imports but consolidating ties with regional neighbours, all the while staying connected to global capital markets and the circulation of skilled labour, recognizing that a world running on clean energy is harder to bring about without access to global trade, manufacturing, and intellectual property.

SECTION 4

Changing Communities

This section considers current tensions in the RBIS and later explores these tensions through the lens of migration governance. Like climate change and rapid technological development, migration involves interdependence, complexity, and the integration of multiple people and communities. Migration can support economic growth and resilient communities but can also accentuate tensions with host and transit communities if not managed well. The response to human migration can just as easily empower or undermine individual rights and liberties. Thought of as a complex system of interactions, a number of risks emerge for communities and migrants that compel multilateral actors to develop and act jointly to ensure safe and dignified human mobility is possible.

The multilateral system is under pressure to adapt in order to better address systemic risks. It is possible to expose future approaches and challenges to global governance by focusing on the complexities of migration governance.

4.1 The rules-based international system

Major powers have, in recent years, selectively engaged with the global institutions that emerged after the Second World War that, together with international treaties, constitute an important part of the RBIS.[59] Withdrawalism, selective engagement, and resistance to meaningful reform are common strategies that mediate the engagement of States in the RBIS. This has led to a perception of paralysis in the multilateral system, evidenced by, *inter alia*, a retreat from the development and promotion of authoritative and legally binding treaties in favour of informal non-binding arrangements.

Critical observers will find no shortage of examples to sustain the claim of a diminished RBIS. The World Trade Organization has been criticized for judicial activism by the US, which argues that the WTO's trade decisions punish the US unfairly. As a consequence, the US decided to withhold a crucial appointment to the WTO Appellate Body, preventing the WTO from carrying out a core function, namely, that of global trade referee. Global power disputes are also plaguing the International Telecommunication Union (ITU), where the development of new standards in the world body are tied to growing US-China tensions over new and emerging technologies; the global climate accord, which the US felt imposed "intolerable burdens" on the American economy;[60] the UN Convention for the Law of the Sea and the Permanent Court of Arbitration in The Hague, both of which have been undermined most recently by pronouncements from China, which suggested that the decision of a five-judge tribunal regarding China's activities in the South China "amounts to nothing more than a piece of waste paper."[61]

Joint decision-making, mutual commitment, and shared sovereignty, key features of the RBIS, are being eroded by a growing tendency to opt-out of agreements and global institutions on the grounds that an emerging norm or practice infringes on national sovereignty, security or economic interests of a member state. Russia, for example, has recently (re-)emphasized the primacy of its national constitutional legal framework, blunting the force of international instruments and their ability to bind Russian activities. In a recent address to the Kremlin, President Putin asserted:

> "[…] Requirements of international law and treaties as well as decisions of international bodies can be valid on the Russian territory only to the point that they do not restrict the rights and freedoms of our people and citizens and do not contradict our Constitution."[62]

More recently, the Prime Minister of Israel, Benjamin Netanyahu, referred to the International Criminal Court's investigation of Israel as "pure Anti-Semitism,"[63] vowing to protect Israeli citizens and soldiers "in every way from legal persecution." This nationalist turn in global governance undermines international legal norms. It is discussed further in Sections 6 and 7, which explore the impact and consequences of this trend for international security, notably with respect to nuclear non-proliferation and WMD.

Many governments still see value in supporting the multilateral system and RBIS. Not only is the RBIS a useful way of engaging competing powers and restraining and pacifying illiberal governments, but it also promotes mutual interests, encourages resilience and sustains global prosperity. The RBIS makes engagement in the international arena safer and more predictable, levelling the playing field for middle and smaller powers. If the current trend of selective engagement continues, the efficacy and legitimacy of the RBIS is sure to erode over the coming decades. States would be forced to bargain and broker deals outside of globally agreed and, typically, more transparent frameworks. This will benefit great powers who can entrench sector- or issue-specific superiority and may hasten the technological decoupling between the East and West that many fear.[64]

The RBIS has encouraged the promotion of liberal economic policies and values. There is concern that alternative value systems may unsettle or damage established norms. A frequently voiced concern is that human rights norms may be slowly eroding. Chinese representatives have expressed the view that human rights promotion serves at times as "a policy tool to discredit, slander and suppress China,"[65] while Western powers argue that China's important economic influence may be promoting development approaches that are incompatible with established conceptions human rights and human development.[66] The Lowy Institute recently suggested that attempts to invalidate established legal norms is not an example of China working within the RBIS, but an effort to overturn it.[67]

The legal scaffolding built up over many years, which represents the infrastructure of a RBIS, will not crumble overnight. It is more likely that great power tensions will result in the establishment of fewer legally binding treaties as consensus and incentives become more elusive, while informal, non-binding global and regional arrangements multiply. Major power tensions will continue to play out over staff appointments in global institutions and the outcome will influence funding commitments and, by extension, institutional sustainability and agenda-setting. These patterns are not new. However, taken to extremes, the effectiveness of global institutions will be undermined just as States develop the tools and capacities to harness major drivers of progress: coordinated migration, big data, and transparent development finance.

4.2 Human mobility

Existing legal instruments that address the mass movement of people are woefully inadequate to address the human mobility challenges that the world faces today and those on the horizon. A brief survey of conflict- and climate-induced migration make these inadequacies clear (see Section 7.4 for further related analysis on climate-security).

Conflict-induced displacement acts as a major brake on development by depriving affected nations of stability, a skilled labour force and foreign investment opportunities. The figures on conflict-induced displacement cast a long shadow over the MDG successes between 2000-2015. In 2014, the number of people forced to flee from their homes because of conflict stood at 60 million, a record since the Second World War.[68] Today, that figure stands at 79.5 million.[69] And fewer people displaced by conflict are able to return home on average now than was the case in the 1990s: 1.5 million refugees returned on average per year in the 1990s, compared to 385,000 on average today.

2020 marked a notable low point in refugee resettlement with only 22,770 resettled through the UN Refugee Agency, UNHCR – the lowest in two decades and the same number that were resettled 17 years earlier, in 2003 (27,338).[70] This figure reveals the fragility of the resettlement programme and how susceptible it is to external shocks. Even the 2008 financial crisis did not affect the number of resettlements as severely as COVID-19 –the average trend of 30 per cent year-on-year growth in resettlement figures continuing through the economic crisis.

Climate-induced migration is a second brake on development, forcing sudden mass movements of people and, often, weakening or completely destroying infrastructure that is costly to replace. Here, too, international legal instruments fail people on the move and their host States. While the Biden Administration has signalled the possibility of expanding refugee protections for climate migrants in a recent Presidential Order,[71] enshrining such protections in globally binding instruments is a long way off, leaving woeful gaps in protection for future climate migrants.

Climate is already a major driver of human mobility and it could easily eclipse other forms of migration over the next three decades.[72] The effects are not limited to fragile States in Africa where drought and soil erosion is well documented and already undermining livelihoods. Climate-induced migration can be traced to all parts of the world. More than 10,000 people were recently documented migrating from Central America northward following two powerful hurricanes (Etna and Iota). Climate-induced migration is a reality and great effort is currently being devoted to ensuring that climate-induced migration does not lead to, or exacerbate, conflict.

The most significant research effort to date on climate migration has assessed that development efforts today can be harnessed to build resilience to climate migration tomorrow and, by extension, reduce conflict-induced migration.[73] Tailored development initiatives can limit the number of people on the move by aligning labour market profiles, addressing pockets of poverty, and supporting diversified, climate-resistant economies. Tailored regional solutions could also result in protections for migrants and refugees that go well beyond what is currently mandated by existing international instruments. The recent decision by Colombian President Iván Duque to provide legal status to more than 1.7 million Venezuelan migrants in Colombia is one such example.[74]

Too frequently, migration finds its way to the development agenda through discussion of remittances and diversified financing for development. This is, in part, the product of a normative view that emerged in the early 2000s that linked aid to personal responsibility. Remittances were seen as both an essential complement to official aid, but also a means for promoting development in receiving countries which, it was hoped, would stem the tide of global migrants. However, financial inflows, whether through remittances or ODA are unlikely to lead to a reduction in human migration over the coming decades – it is more likely to capacitate people to move, providing them with the (minimal) resources they require to attempt to establish a more secure life elsewhere. Recent research has shown that increases in development aid can lead to increased migration, and specifically low- and unskilled migration.[75] It is now believed that until GDP levels reach USD 8,000-10,000 purchasing power parity, sustained and substantial migratory movement can be expected.[76]

Whether in search of an opportunity to improve economic prospects, quality of life, or to escape crisis, conflict or persecution, the number of people on the move is set to increase in the coming years. The most recent experiments in migration governance suggest that the future is one of weak global norms, and stronger regionalized responses.

In September 2016, only a few months away from a historic transition of power in the US and against the backdrop of unprecedented deaths in the Mediterranean from migrant sea crossings, UN Member States issued a non-binding declaration to reaffirm States' willingness to protect the human rights of all refugees and migrants at the UN's first-ever Summit for Refugees and Migrants in New York (leading to the adoption of New York Declaration).[77] The Declaration kickstarted a process that would bring together an unprecedented number of State and non-State groups, including development actors, IFIs, civil society and local governments, to chart a way forward on safe and responsible movement globally.

The international community has historically resisted a global and legally binding agreement addressing the needs and vulnerabilities of migrants outside the traditionally recognized refugee category. The 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families has been ratified by very few States, none of them primary migrant-receiving countries.

Following the adoption of the New York Declaration, work began to develop two Global Compacts articulating non-binding principles to ensure safe and orderly migration and the protection of refugees and asylum-seekers. Most progress in migration governance in recent years has been at the regional level, a mixture of minilateral solutions and grass-roots responses to human migrations.[78] The Global Compacts were the first attempts to scale this progress to the global level and restart a conversation about burden-sharing and the human rights of people on the move in contemporary society.

The flurry of activity between 2016 and 2018 resulted in the first internationally endorsed *agreement* addressing the rights of migrants in a holistic and comprehensive manner – not a legally binding agreement, but a declaratory text much like the MDGs and SDGs.[79] This has been called a "paradigm shift" in migration governance.[80] For some, it succeeded in putting people at the heart of migration governance, while for others the Global Compacts helped legalize illegal migration and confused categories of people on the move, migrants and refugees, foreign workers, legally contracted expatriates and illegal workers.[81]

Member States agreed on a *cooperation framework* built on non-binding principles that could guide and clarify international action. This cooperative framework did not go beyond any existing State commitments. Yet even this bar was too high from some States which, while fully participating in the elaboration of the non-binding principles, ultimately did not cast a vote in favour of the final framework, many ceding to public pressure, stoked by disinformation campaigns, which promoted the view the Global Compact would infringe on national sovereignty by limiting a State's authority to control its own borders.

It has been argued that the legacy of the two Global Compacts will be a *norm-filling role*,[82] clarifying understandings and interpretation of existing areas of international law, including, as noted by the Rt. Hon. Alistair Burt, UK Minister for the Middle East in 2018 and author of the UK Ministerial Statement, "the responsibility of States to accept the return of their citizens when they no longer have the right to return elsewhere."[83]

While the Global Compacts do not have the staying power of an international treaty, they help in concrete ways – and this is perhaps the more instructive point when considering the future of the global governance and the ability of the multilateral system to address systemic risks. The Global Compact for Safe, Orderly and Regular Migration, for example, has helped to catalyze and mobilize regional actions, which leads to better coordination and accountability. This is achieved through periodic voluntary reviews carried out globally every four years (starting in 2022), and regionally every four years starting in 2020. Furthermore, the Global Compacts may still form a source of law even if they lack the force of law – they are not legally irrelevant. As noted in Section 2 and discussed in Section 5, the judicialization of global governance means that in the case of migration, courts could refer to the Global Compacts in their effort to substantiate political commitments by States and as a way to interpret national law. Just as in the case of environmental litigation (see Section 5), the coming decade, and more acutely after 2030, could bring about more attempts to instrumentalize soft law, like the Global Compacts, to uphold the rights of migrants that are missing from legally binding treaties. This lends further importance to the view put forward in this report that the future of global governance will be shaped by non-State actors working through different forums, notably the courts, to achieve desired protections and development outcomes.

4.3 Outlook

For at least a decade, observers have been drawing attention to the decline of multilateralism. Traditional multilateral engagement between States will become more competitive over the medium term, frustrating global institution-building efforts, decisive action in the Security Council, and the prospect of updating ageing multilateral treaties and global institutions increasingly unfit for purpose. The national economic fallout from COVID-19 will encourage leaders to turn away from global multilateral efforts, allowing them to focus on national and regional development and recovery instead.

Single-issue political alliances, sometimes referred to as minilateralism, will trend over this period, giving rise to a proliferation of smaller, more agile issue-centric coalitions (e.g. the Alliance of Small Island States, the 5+5 subregional Dialogue for Western Mediterranean countries). These coalitions will help leaders move early and decisively on emerging issues without waiting for others to lead,[84] resulting in novel alliances and collaborations, even among States with generally opposing world views.

The purpose of issue-centric coalitions is to bypass gridlock in traditional multilateral forums and this does not require long-term alliances.[85] The pursuit of rapid, action-oriented coalitions will place greater value and importance on city-level partners.[86] Mayoral coalitions – such as the one incubated as part of the Global Forum for Migration and Development – will become adept at leveraging decentralized development pathways to achieve development gains by working under the noise and bluster of intra-State diplomacy. Cooperative arrangements that draw in increasingly influential international actors, like cities, will point the way forward.

While levels of decentralized development cooperation (DDC)[87] will remain modest, countries from every region will be engaged in this form of cooperation and, in the aggregate, they will represent an important alternative source of finance and technical cooperation for local governments struggling to meet the demands of denizens.[88] By 2030, in a major shift, migration governance will come to rely very heavily on non-State partnerships to effectively address human mobility, a decisive move toward both the decentralization and pluralization of migration governance.

Actions taken by countries like Peru, which extended temporary health coverage for both refugees and migrants suspected of or testing positive for COVID-19, and Colombia (see above), will give rise to a demand for a more responsive global protection regime that can address migratory movements brought about by systemic failures, such as social protection collapse in fragile States, loss of livelihoods in climate-affected areas, health crises and conflict. A convergence of protection regimes for migrants and refugees will take place at the regional level between 2030 and 2040, in recognition of: (1) the interconnected socioeconomic risks connected to extended vulnerability experienced by people on the move, and (2) the fact that migrants spend time in multiple countries for extended periods en route to an anticipated final destination. A global agreement on human mobility will not be reached by 2050 owing to increasingly balkanized international relations. However, free regional movement will become the norm and will be facilitated by digital technologies, and new businesses that will supplement a burgeoning migration *industry* with the data required to monitor human mobility, communicate opportunities, and warn of risks. These firms will facilitate human mobility by working with migrants and governments to analyse labour shortage gaps and excesses more rapidly. New migration brokers will struggle to establish their credibility and, after experimenting with various models, will partner with local governments and host communities to facilitate safe migration that leads to improved livelihood outcomes.

Local partners will fill crucial information gaps, this will help ensure efficient labour allocation, combat labour trafficking, and improving the resilience of small and medium enterprises (SMEs) that struggle to fill labour shortages. The African Migration Observatory (AMO) in Morocco will provide a gateway for labour market information by 2030, pairing expatriate skills with continental labour requirements, accelerating return migration to Africa. New regional data and migration monitoring frameworks will exist globally by 2050, building on the AMO in Morocco.

The process of regional cooperation will accelerate through 2035, even as issue-based coalitions multiply, and in spite of the UK's departure from the EU. The AfCFTA and the Regional Comprehensive Economic Partnership in Asia will be evidence of renewed energy and enthusiasm for regional cooperation, as will be the growing membership of the Shanghai Cooperation Organization. While few regional blocks will have sought the kind of special status that the EU has negotiated for itself at the UN – permanent observer status and enhanced participation rights – other regional blocks will attempt to follow the EU's lead, as reshoring of production, innovation, and economic activity force reconsideration of regional political alliances. These strengthened regional alliances will help shape the balance of power in negotiations over taxation, data ownership, and debt.

Regional dependencies will deepen even further post-COVID-19, and confidence in the US dollar will weaken as international investor holdings in US Treasuries diminish. This will cause South-East Asian nations to acknowledge that their economic success is more closely tied to that of their regional neighbours, which will lead to greater acceptance of China's leading role in industry and innovation, and will facilitate the emergence of a *yuan block*, predominantly reliant on the Chinese currency instead of the US dollar by 2030, by which point GDP in China and the US will have reached parity. This is helped by the comparatively rapid recovery from COVID-19 shocks in China, up to two years faster than other developed economies, owing partly to the preponderance of State-sponsored enterprise, which will have grown in importance and stature following the Trump-Xi trade dispute.[89]

An increasingly diverse group of international actors will leverage soft law (guidelines, compacts, non-binding principles) to achieve modest normative innovation and governance objectives. This will largely involve rearticulating or clarifying existing norms in ways that result in greater scope and flexibility for action without demanding hard commitments at the outset. This soft mode of network governance will become the norm but also the principal source of governance innovation.

SECTION 5

States Challenged

This section considers two trends that will challenge States over the next thirty years: stakeholder activism and rapid technological change.

5.1 Stakeholder activism

Since 2008, the UN has convened a Private Sector Forum to enlist businesses in a collective effort to solve major global challenges. Former UN Development Programme (UNDP) Administrator Helen Clark observed at the 2015 Private Sector Forum, held on the eve of the launch of the SDGs, that: "how business does business, and where it does business, will have a significant impact on whether the SDGs are achieved."[90] These choices – the how and the where of business activity – are shaped through consumer pressure, public opinion and shareholder leverage, all means by which stakeholders can exercise pressure on government and corporate actors. Stakeholder activism is responsible for reshaping business approaches in the corporate sector, as well as in finance and investment, ushering in new standards of accountability from the bottom up (environmental, social and governance [ESG] standards aim to measure commitments to sustainable development; in both form and function, they are more substantial than corporate social responsibility [CSR] commitments).

The emphasis on ESG criteria in investment, for example, is fueling a new wave of corporate activism and has reoriented markets on an unprecedented scale. Bloomberg Intelligence has estimated that global ESG assets will exceed USD 53 trillion by 2025 (a third of all assets under management), representing a rapidly accelerating trend to direct finance to support the sustainability agenda. Investors are shifting decisively away from the long-dominant view that sustainability considerations must come at the expense of profit. What is more, many institutional investors now point out that their responsibility extends far beyond profit motives alone, acknowledging a fiduciary obligation – the legal principle that requires that investors act only with regard for and in the interest of beneficiaries – to be sensitive to client values and to risks that might jeopardize a client's financial interests, which includes sustainability considerations.

So decisive is this change that a 2005 Freshfields report found that many investors had incorporated financially material ESG issues as part of their fiduciary duties even when their clients did not explicitly require them to do so.[91] The ethical conduct of fiduciaries compels investors to *interpret* what would be in the best interest of shareholders. This interpretation is largely guided by ESG considerations today and this guidance, while sometimes provided by States, is also provided by non-State actors. For example, more than half of the stock exchanges operating around the world provide guidance to companies on ESG reporting.[92] Through the Sustainable Stock Exchanges initiative, UN partners play a mediating and facilitating role for these initiatives.

In early 2020, *The Economist* warned of a "tricky post-pandemic environment" that will see the rules of the game between business and society recast."[93] Stakeholder activism is one way these rules are being rewritten. As noted earlier in this report, one driving force behind this movement is the view that governments have not always served as agents of inclusive change. Critical studies of social inequality hold both government and industry responsible for the failure to achieve more inclusive development. In democracies, electorates have clear levers that can be used to influence public policy. However, frustrated by unresponsive governments, they are now attempting to catalyze change through the private sector by steering initiatives from within corporate boards and through investor leverage.

The Shareholders for Change (SfC) network is one example of stakeholder activism. With Euro 25 billion under management, the SfC has leveraged its position as an investor to pressure corporate actors to make sustainable investments or release information that would contribute to greater transparency and a better evaluation of businesses' commitment to ESG criteria. The SfC has had some notable successes. For example, by purchasing a single share in Rheinmetall, a defense contractor, the SfC was able to secure speaking rights at the 2018 and 2019 contractor's Annual General Meeting to spotlight the use of Rheinmetall bombs in the Yemen war.[94]

There is a risk that overzealous approaches to sustainable investment (such as divestment and de-risking) create or exacerbate harm and dampen development trajectories by undermining crucial sectors for developing economies that are not able to transform sufficiently quickly. De-risking – the process by which finance and private business dissolve connections to businesses with perceived toxic practices – could lead to a rapid divestment from some sectors, leaving millions of workers out of jobs.

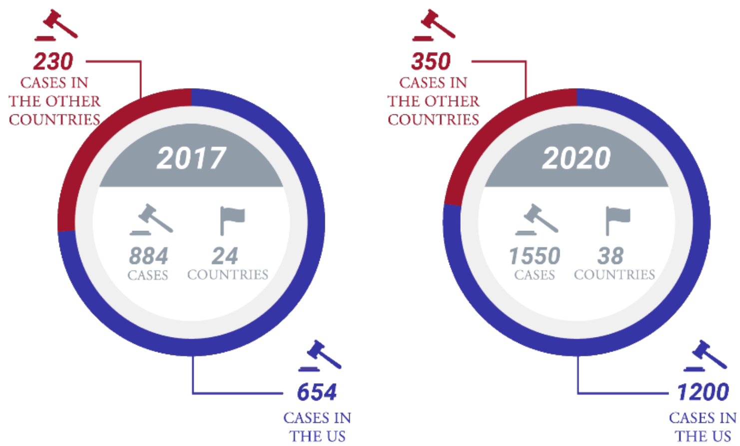
Counterintuitively, de-risking may also lead to more risk in the banking system, especially in emerging markets. Recent studies have shown that banking activity is being concentrated in fewer institutions as the financial sector seeks to limit risk in its business relationships.[95] For example, the International Finance Corporation (IFC) has found that de-risking behaviour imposes administrative and compliance obligations that disadvantage institutions in regions where specialist staff are far less numerous. All markets are affected by de-risking behaviour but institutions in sub-Saharan Africa have perhaps paid the highest penalty, where over a third of IFC-surveyed banks reported a decrease in critical correspondent bank relationships.[96]

Divestment is seen as the ultimate sanction for investors with ESG concerns. In February 2021 alone, total divestments from fossil fuels of USD 10 billion were announced by the New York City pension funds and Norway's sovereign investment fund, with more investors threatening to follow suit. This comes on the heels of a Euro 39 billion divestment announced by Sweden's pension fund, which intends to fully exit the energy sector (a reaction to Paris Agreement climate commitments). So far, funds representing 9 trillion in assets under management have made 2050 net-zero commitments. However, letting the fossil fuel industries fully collapse is not a sustainable solution: a gradual transition is necessary. It is important to recognize that the fossil fuel industry, particularly in the Middle East and North African region, provides jobs for labourers in neighbouring countries where livelihoods are already at significant risk following COVID-19.

While overreaction by financial actors certainly poses a risk to coherent development strategies, apathy from corporations, investors, and governments may also encourage non-State actors to reach for new levers. And one notable recent trend has been a turn to the judiciary. Legal challenges that aim to force governments and business actors to meaningfully engage with the sustainable development agenda are on the rise and more can be expected over the coming decades.

The judicialization of the international order represents a notable challenge to global governance. The rapid increase in climate litigation is evidence of this change. Climate litigation has two notable features: it compels proactive regulation and targets harmful deregulation. Climate litigation includes cases brought against private sector actors and governments. For example, a number of private individuals and civil society organizations, as well as several youth coalitions, have brought cases before domestic and international courts claiming that their rights have been comprised because their representatives in government have not set sufficiently robust and ambitious climate targets.[97] Even though courts are not always able to enforce their decisions, the declaratory statements issued in judgements can shift understandings of responsibility and accountability in important ways and may serve as sufficient remedy for this new class of plaintiffs.

Figure 5: Climate litigation trends



Source: United Nations Environment Programme (2020)[98]

The rise of climate litigation is a global phenomenon (see Figure 5, above). In Australia, a single member of the Retail Employees Superannuation Trust (REST) was able to force one of the largest pension fund in Australia with AUD 50 billion under management to address his climate concerns.[99] In 2019, a group of children argued that Argentina, Brazil, France, Germany, and Turkey violated their rights under the United Nations Convention on the Rights of the Child by making insufficient cuts to greenhouse gases and by failing to use their role in the G20 to encourage the world's biggest emitters to curb carbon pollution.[100] The case centred on a claim that the climate targets violated rights under the convention to life, health, the prioritization of the child's best interest, and the cultural rights of petitioners from indigenous communities.[101] In the Philippines, the Philippine Commission on Human Rights has been called on to investigate human rights implications of climate change and ocean acidification. [102] Courts offer the prospect of remedy to climate-affected populations and a forum for normative interpretation. Domestic courts are emerging not as a substitute for global governance institutions but as an important complement to them.

5.2 Technological change

Technology has played a crucial role in the response to COVID-19. Advances in digital communication have allowed students, professionals, and families to remain connected through the first modern global pandemic. It has been a boon to the world's scientists who have used open science platforms to share discoveries in real-time, vastly reducing the time normally spent between vaccine research and development. These benefits build on decades of investment in innovation and digital infrastructure, which accelerated the digitalization of government and the services that make modern life possible. The speed of technological change has both helped and hindered development objectives and has brought into stark relief the tradeoffs of rapidly digitizing societies.

The benefits of a more connected world are clear. Online connectivity ensures business continuity in both private and public sectors in the event of mass disruptions, be it from political upheavals or global health crises. Technological innovation is also a driver of economic growth. Countries that are able to graft private and public sector activity onto globally connected digital backbones stand to gain trillions in economic growth over the next decade alone, simply by reducing information asymmetries.[103] Equitable access to online communities and resources also vastly improve the educational experience of children, young adults, ageing populations, and research and innovation communities. And improved connectivity can also support democratic and participatory governance, at the very least by strengthening public accountability and fostering higher participation by women who are currently estimated to be 30-50 per cent less likely to use the internet to participate in public life in emerging and low-income economies.[104]

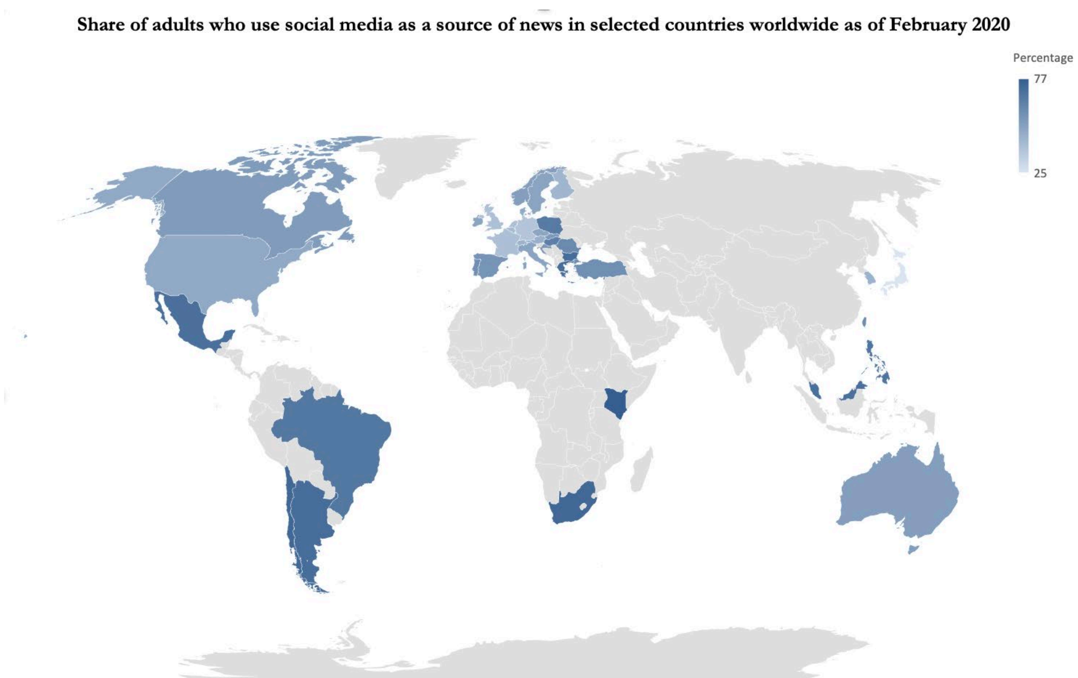
These benefits accrue to 60 per cent of the population at present, while the other 40 per cent remains locked out of robust digital networks, many in the developing world, where approximately one in five people lack access to the internet. The fourth industrial revolution will not guarantee good governance, trust, and inclusive development, but these objectives are greatly hindered by low participation in public life that digital technologies facilitate.

It will take immense investment from the private and public sectors, as well as multilateral coordination, to capitalize on the potential of the fourth industrial revolution.[105] Technology standards need to be agreed, robust data protections must be localized but also harmonized across regions to allow for interoperability, and incentive structures must be identified to support the capital investments required to reach the other 50 per cent of the global population presently lacking digital access, which has been estimated will cost USD 450 billion (to connect 1.5 billion users).[106]

Rapid technological development can be of tremendous support for global development ambitions, but it will also present new risks for governments, democracy, and complex challenges to cooperation in the international system.

Many of the very same challenges presented by the movement of people is present in the movement of bytes. The risk is that resurgent nationalisms will lead to a rebirth of technonationalism that will come to dominate future responses to digital governance replicating security, economy and sovereignty concerns that have impeded progress in the global governance of migration. Just as with the securitization of physical borders – and, more recently, the projection of national borders beyond the physical State territory – 'digital territories' are arising, information infrastructure (wires, cables, satellites) that are invested with normative ideas about the nation.[107] US Executive Order 13873 of May 2019 aims to securitize the technology supply chain by preventing the sale of Chinese 5G technology to American firms and, in so doing, has demarcated a digital territory it is intent on defending. China has been actively proposing new global technology standards that will extend its digital territory by ensuring minimal dependence on foreign technologies while growing a marketplace for firms and technology assets developed at home. While both countries are leaders in advanced technologies, they stand more to lose than to gain from enforcing rigid technical spheres of influence. In the context of digital governance and standard-setting, the challenge to States will come from outside the principal technology giants, from emerging and middle powers that will argue that strictly bounded spheres of digital cooperation undermine innovation and development. Regional blocks, such as the EU, are in the strongest position to advance this argument owing to their market size, closely followed by the emerging African trading block.

Figure 6: Social Media as a News Source Worldwide 2020



Data source: Amy Watson, Statista (2020)[108]

Disinformation, the manufacture and suppression of information to undermine public confidence in a person, State, or other groups, is an extension of national strategic rivalries in the digital space and one of the most prevalent risks to States in both developed and developing countries.[109] A recent Oxford University study concluded that: "around the world, government actors are using social media to manufacture consensus, automate suppression, and undermine trust in the liberal international order."[110] This form of information manipulation has fuelled mistrust in the key public institutions charged with public safety and governance around the world. The platforms and technologies that are so key to social resilience are being weaponized to target public opinion, undermining confidence and public trust in democratic processes. Disinformation campaigns are ruthlessly effective because they leverage communications platforms that do not vet and validate information for accuracy but are nevertheless increasingly turned to as legitimate sources of information (see Figure 6, above).

The crisis of legitimacy triggered by disinformation campaigns peaked just as the global community was coming together to address one of the most complex feats of global governance since the Second World War: the development and global distribution of a vaccine for the COVID-19 pandemic. A 2019 Ipsos survey of over 25,000 people in 25 economies found that 86 per cent of online global citizens were exposed to fake news and the same number report having believed the news source at least once.[111] Many believe that the internet has exacerbated the amount of misinformation (87 per cent) and negatively impacted political discourse (87 per cent).[112] While trust in social media as a reliable source of news is declining overall globally, it is still relatively high in Africa.

Just as emerging and low-income countries prepare for a boom in internet penetration, disinformation techniques are being refined and perfected. Disinformation campaigns have been documented on all continents, and include, *inter alia*, incitement to violence (the Rohingya in Myanmar and Muslims in Sri Lanka), discrediting political opponents (the US and the Philippines), and spreading rumours that undermine the efficacy of public health systems (the Democratic Republic of the Congo). Indeed, recent studies show that political disinformation campaigns have more than doubled between 2018 and 2020.[113] A Johns Hopkins University researcher investigating the use of anti-hate speech laws in Ethiopia described social media as: "the biggest challenge to peace and security in Ethiopia".[114]

Developing countries will face the same challenges to public trust and social cohesion experienced in developed countries and may resort to crude and simple tools to combat disinformation online in order to protect comparatively fragile institutions of public governance in a climate of low media literacy. The Ibrahim Index of African Governance records overall positive governance performance on the African continent in recent years, but there is evidence of backsliding between 2015-2019, and in 2019 performance fell for the first time since 2010.[115] This confluence of factors poses a triple threat that is a serious challenge to African States.

A number of best practices have emerged tailored to local circumstances, including networked radio stations in eastern and southern Africa to counter disinformation related to COVID-19, a hotline for citizens to file complaints against false news propagated by the media in Egypt, and word of mouth campaigns through community influencers in the Democratic Republic of the Congo (DRC). In emerging economies with more capacity and deeper internet penetration, media literacy campaigns have proven effective (by comparison, only 10 per cent of the population in the DRC has access to the internet, making media literacy an impractical tactic to counter the spread of disinformation). However, the Council on Foreign Relations cautions that regulators in developing countries could lose patience with digital literacy initiatives and "find greater willingness to employ illiberal solutions" such as internet shutdowns, which are a regular occurrence in India and have been attempted in the Solomon Islands.[116]

The fourth industrial revolution blurs the physical and digital worlds, but the consequences for States will be tangible. New technologies will raise all voices, not solely the credible and productive ones. Intensification of great power rivalry in a time of significant upheaval will leave fewer allies in the fight against disinformation and the politicization of shared digital spaces.

5.3 Outlook

The magnitude of investment required to close the gap between countries that are leading and trailing in technology development and adoption is immense. Speed and latency will remain an issue in developing countries through the 2020s. And only a quarter of the globe will have access to 5G technologies by 2030. Costing between USD 700–900 billion, these investments could draw down capital finance available for new technology infrastructure in the developing world.[117]

In 2020, the social and economic benefits of the digital revolution have also never been clearer nor better measured. Econometric modelling establishing the link between broadband connectivity and economic growth will prompt new investments to overcome financing constraints, which will lessen by 2030, notably with the help of African venture capitalists that will be keen on securing first-mover advantage in a growing technology market. Capital directed at improving connectivity in the developing world will be focused on mobile technologies through 2030, as well as improved data exchanges and data storage. It is only by 2040 that low-earth orbit (LEO) satellites will contribute to improving connectivity in remote regions where infrastructure (cabling) is still prohibitive.

Aware of the significant economic benefits that accrue from greater connectivity, governments outside of the technology pioneer group (US, Japan, Korea, and China) will resist pressures to side with one pioneer country over another and avoid comprehensively rejecting new technologies on grounds that they might present a security concern. They will have calculated that the cost of exclusion from cutting-edge technologies is too high.

The digital gender gap will begin to close over the period 2020-2030 owing to slow but steady improvements in broadband connectivity in emerging and developing countries. The biggest gain will come from people moving from the informal sector to the formal sector in Africa – which will look to employ 50 per cent of residents by 2030, an improvement from 15 per cent in 2018 – as rapid urbanization multiplies employment opportunities in the technology sector.

Internet access will be evenly distributed across genders by 2030, mimicking gender parity progress in mobile banking, which will have made great strides between 2020-2030. The most notable improvement is in sub-Saharan Africa where providers will have built on best practices to grow their female customer base.

State intervention in regulation will strengthen internet ecosystems and support the digital localization agenda in Africa, building on progress achieved by Kenya and Nigeria between 2010 and 2020. The Silicon Savannah initiative in Kenya will gain momentum as regulatory regimes harmonize following the establishment of the AfCFTA. The strategic importance of personal, public, and commercial data, and the improved technology infrastructure resulting from both the future success of the Silicon Savannah initiative and new data monetization imperatives, will hasten data localization in Africa. Building on successful data monetization strategies by industry leaders like Apple and Facebook,[118] African technology firms will prioritize data management in Africa and, by 2030, will leverage big data collected in new African data hubs. The revenue will be used to offset capital investment costs in technology infrastructure.

The localization of big data will accelerate the development of smart cities, which will prompt city governments to demand a review of existing taxation policy and grant municipalities greater control over revenue generation by 2040. There will be a simultaneous massification of privacy-preserving technologies, for-profit disruptive digital services (hacking, disinformation, media manipulation), and the cybersecurity industry. Intellectual property auctions will become more common and provide greater access to both licit and illicit technologies. For profit, disruptive digital services will leverage this development to help authoritarian governments manipulate conversations in the digital commons, eroding important governance gains in fragile States. The cybersecurity market will nearly double in size from USD 170 billion in 2020 to USD 300 billion by 2040, as more governments, people, and industry generate data and search for new ways to defend databases from hackers, given their centrality to (new) smart city life, globally.

While there will be notable technological progress by 2030, it will not be consistent across countries, which will lead many to use the end of the SDGs to decry missed development outcomes, especially in emerging and developing countries. Because a significant part of the momentum in the technology sector will be spurred on by private investment, citizens will challenge corporations through expanded ESG criteria to direct part of their capacities to accelerate sustainable and equitable digital growth and fair and equitable taxation of the digital economy. Pressure will be applied through the UN business and human rights frameworks (such as the Principles for Responsible Investment and the UN Guiding Principles on Business and Human Rights) and boardrooms. This will facilitate the inclusion of internet connectivity in new ESG criteria from 2030, which will emphasize the centrality of digital access to human development.

The greatest pressure will build in Africa and Asia, where ESG consideration in investment has traditionally lagged behind Europe and North America, but where the negative externalities of industry on climate, environment and quality of life are amongst the most pronounced. Building on a successful wave of climate litigation, an important number of claims will be brought to domestic courts in Asia, Europe, Latin America, and North America in an attempt to force technology giants to expand access to digital tools in the developing world in more diversified sectors (not solely green technologies, which will largely benefit developed economies).

SECTION 6

Conflict Trends

Immediately following the Cold War, the number of armed conflicts dropped rapidly, accompanied by a rise in the willingness and ability of international organizations to intervene in conflict-affected, fragile States.[119] While the number of inter-State conflicts has remained extremely low, there has been a dramatic increase in the number and severity of intra-State (civil) wars over the past 15 years. Major civil wars – those with at least 1,000 battle deaths per year and involving at least one State actor – had declined by roughly 70 per cent from 1990 to 2003, but have since returned to levels not seen since 1992.[120] This has resulted in a sixfold increase in the number of battle deaths in major civil wars between 2011 and today, with 2014 and 2015 standing as the deadliest years since the Cold War.[121]

6.1 Recurrence and relapse

One of the key factors influencing the rise in the number and intensity of civil wars has been the growing share of recurrent, rather than new-onset, conflicts.[122] Recent studies have indicated that nearly half of today's conflicts show signs of recurrence, while 60 per cent of conflicts that were resolved in the early 2000s have since relapsed into war.[123] This accords with a longer-term fact that roughly half of all conflicts since the end of the Cold War have recurred, with 20 per cent recurring three or more times.[124] This trend is linked to the fact that today's civil wars are seldom resolved via outright military victory: in the 1980s, seven times more conflicts ended in military victory than in negotiated peace agreements, whereas today roughly five times as many conflicts end in peace settlements.[125] While the prevalence of peace settlements is likely a positive development in terms of limiting the immediate loss of life in war,[126] negotiated settlements appear less stable in terms of preventing future relapse into conflict.[127] The failure of negotiated settlements to resolve underlying conflict drivers is demonstrated by the fact that 64 per cent of recurrent conflicts are over the same or overlapping grievances, with less than 1 per cent found to be unrelated to the previous conflict.[128] The likelihood of a war happening today appears intimately linked to a prior war in the not too distant past.

6.2 Intractability

When compared with conflicts 30 years ago, today's wars are proving far more intractable and difficult to resolve in a sustainable manner via traditional forms of statecraft and political settlements amongst elite actors. Most of the well-known conflicts of the early 1990s (Cambodia, Mozambique, Guatemala, Rwanda, El Salvador, Namibia) could be characterized as "ripe" for political resolution, with parties generally amenable and capable of eventually reaching a comprehensive peace settlement.[129] In contrast, few if any of today's major conflicts display a similar level of ripeness, with conflicts in Yemen, Syria, Afghanistan, Libya, Somalia and Mali unlikely to resolve themselves via sustainable comprehensive settlements in the near future, despite billions of dollars of international investment and sizeable peace operations in-country.

The intractability of today's conflicts can be explained, in part, by understanding the changing character of conflict over the past decade, which has been driven by four interrelated factors: (1) the growth of transnational organized crime, (b) the rise in importance of jihadist groups with global ambitions, (2) the willingness of external actors to intervene directly in civil wars, and (d) the damage done to State institutions and credibility as a result of today's conflicts.

Transnational organized crime

The post-Cold War period witnessed a rapid end to proxy wars amongst great powers and a simultaneous explosion of globalization, connecting both licit and illicit economies around the world.[130] The result was an opportunity for armed non-State groups to grow and participate in transnational black markets, often connecting disparate groups via trafficking and smuggling routes across huge regions. With access to funds and other resources that flow beyond the reach of States, armed groups are able to extend their capacities on the battlefield, while also resisting traditional economic coercion such as sanctions. Research indicates that those conflicts involving significant flows of contraband resources – including typical conflict resources like minerals, timber, poppy, or cocoa – tend to persevere longer than others.[131] Today's conflicts in Africa and the Middle East demonstrate the enormous reach of transnational criminal networks that stretch from the ISIS in Iraq to Boko Haram in Nigeria and Al Shabaab in Somalia, and the extent to which illicit markets have sustained these groups and allowed them to pose long-term threats to the State.

The growing role of illicit markets has also complicated traditional conflict resolution by shifting incentives and coherence within armed groups. Access to lootable resources can create discipline problems in which factions are unwilling to enter into political settlements that may result in loss of revenues, while also raising the risk of continual fragmentation. This has happened in eastern Congo, where the number of armed groups has more than quadrupled in the past 15 years due partly to thriving illicit economies around artisanal mining. It can also be seen within the Taliban in Afghanistan, where parts of the movement have become more autonomous due to control of poppy production.[132]

The evolving political economy of conflict toward illicit networks has an especially detrimental impact on State-run governance for two related reasons: criminal organizations overtly corrupt and weaken State institutions, which in turn allows non-State groups to directly challenge the State as the principal provider of security and basic services.[133] In West Africa and the Sahel, for example, major transit routes of drugs, human trafficking, arms, and money have created constellations of power that often command far more authority than State institutions, while also stripping the State of important sources of income and legitimacy.[134] Similar trends can be seen in Central Asia and Latin America as violent criminal networks have extended their reach to a point where they can rival the State, often without recourse to open warfare.[135] The pervasive presence of illicit economies across fragile regions has acted to weaken State capacities, prevent easy resolution of armed conflicts, and slow post-conflict institution-building needed to prevent relapse.

COVID-19 is further exacerbating these trends today. The International Growth Centre has found that between January and August 2020, the number of conflict-related events in Africa rose in 43 countries compared to the pre-COVID-19 levels. Fiscal stimulus packages are projected to extend debt-to-Gross Domestic Product levels from an average of 60 per cent at the end of 2019 to roughly 70 per cent by the end of 2020.[136] See Section 3.2 on a discussion of national debt constraining development outcomes.

The rise of global jihad

Since 2003, the growth of civil wars has been accompanied by an increasingly prominent role of violent jihadist groups and a shift of conflicts into Muslim majority countries. Over the past 15 years, roughly 64 per cent of civil wars have taken place in Muslim majority countries,[137] while the deadliest conflicts have predominantly involved Salafi-jihadist fighters.[138] The rapid growth of ISIS in Iraq, Syria and Nigeria contributed to a dramatic upsurge in jihadist fighters around 2015, but even as ISIS' influence has waned, Al Qaeda and other jihadist networks have continued to spread across much of the globe.

These "new new" wars involving jihadist groups with global ambitions have two important implications for the character of today's conflicts.[139] First, they strongly tend to resist negotiated settlements. Groups like ISIS and Al Qaeda are driven by a largely anti-Western ideology, ambitions to establish and govern large territories according to Sharia law, and a willingness to target civilian populations to achieve their ends. Subjected to international sanctions that tend to isolate their leadership and pursuing maximalist demands that clash with basic human rights standards, these groups are seldom included in traditional multilateral- or Western-led peace processes. Instead, they tend to be addressed by use of force and counter-terrorism operations, which may temporarily weaken their fighting strength (as in the case of ISIS in 2018) but is unlikely to result in a comprehensive or sustained peace settlement. Indeed, in many settings – including those involving UN peacekeeping – the counter-terrorism approach has led these groups to target international actors as legitimate targets of war.

Second, the growth of Salafi-jihadist groups has become increasingly networked beyond national boundaries. ISIS, for example, has found partner groups in Sudan, the Philippines, India, Algeria, Pakistan, Uzbekistan, Libya, Syria, Egypt, Lebanon, Indonesia, Tunisia, Russia, Yemen, Afghanistan, Saudi Arabia, Iraq, Nigeria, and Somalia.[140] Even groups with more domestic agendas, such as the Taliban or Boko Haram, now rely on extensive international networks that funnel resources, recruits, and political influence around the globe.[141]

By framing their goals around transnational, pan-Sunni identity, these groups have succeeded in mobilizing hundreds of thousands of recruits and far more diverse sources of support. This global network complicates conflict resolution efforts, allowing groups to subvert international sanctions, continue to recruit even when under intense military pressure, and draw on deep sociopolitical resentments in highly unequal societies to maintain an enthusiastic support base.

Internationalization of conflicts

In 1991, roughly 4 per cent of civil wars were internationalized, internal conflicts in which an international actor intervened militarily on one side or another. By 2015, that number had increased tenfold to 40 per cent, demonstrating a sustained trend toward external intervention in domestic conflicts.[142] This dynamic is abundantly clear in the current conflicts in Yemen and Syria, where foreign forces have directly participated in the fighting, and also in settings like Somalia, which have a large number of proxy fighters supported by foreign powers.[143] Evidence suggests that international interference in civil wars tends to prolong them, while also posing significant challenges to peace processes.[144]

Internationalization intensifies the spillover effects of civil wars, as powerful countries risk coming into more direct confrontation with each other on the battlefield. The presence of significant numbers of US and Russian military forces in the Syrian arena in 2020 is unprecedented since the Vietnam War and has resulted in worrying skirmishes that could easily escalate.[145] Similarly dangerous dynamics have played out in Yemen as Saudi Arabian and Iranian military operations have risked a much broader regional conflict.[146] In Ukraine, the risks of "contagion" – of spillover affecting neighbouring countries – are magnified in these contexts and could, in fact, point to a growing threat that civil wars could become a trigger for great power clashes.[147]

The failure of State-building

Civil wars tend to have a deeply detrimental impact on State institutions and the capacity of national governments to provide basic security and services to their citizens. This results from the fact that most of today's civil wars reflect a competition for the right to govern, as rebel groups attempt to wrest territorial control and legitimacy from the State. In Mali, a 2012 secessionist movement triggered a war that has devastated the country and destabilized the region; in Afghanistan, the Taliban has overtaken vast territories from the Afghan State; in Yemen, the Houthi rebels currently control a significant part of the country; and for a three-year period, ISIS posed a direct challenge to the Iraqi State.

Contestation over the right to govern has contributed to the destruction of State-run governance capacities in a range of fragile settings. Areas beset with long-standing conflicts have struggled – and largely failed – to improve their governance capacities, despite enormous international efforts to "fix" them.[148] In Afghanistan, the US has spent more than USD 100 billion to rebuild State institutions after the 2001 invasion. Yet, today the country appears to be falling back under Taliban control, with growing numbers in the Afghan population seeing the group as a more legitimate source of governance.[149] After decades confronting Al Shabaab in Somalia, international support to State-building runs in the billions per year without meaningful improvements in the governance capacities of the country and a resurgent rebel group.[150] Similar dynamics are evident in the Central African Republic, South Sudan, Mali, DRC, and Libya, where a growing body of evidence suggests that the international efforts to build and extend State capacity and authority have consistently failed.[151]

The overwhelming failure of State-building points to perhaps the most important aspect of today's civil wars: they are deeply socioeconomic processes that embed violence, corruption, and lack of trust in institutions into societies. They produce a "savage order,"[152] in which the relationship between State and citizen tends to enable violent groups rather than constrain them, a "political marketplace"[153] where the right to govern is a violence-backed bargaining process that rarely results in a trajectory towards the kind of liberal State envisaged by Western powers. Today's conflicts have transformed the right to govern into a contested resource that does not reside neatly in State institutions but is produced by a range of actors including armed groups, businesses, traditional leaders, individual citizens, transnational criminal networks, and elements of the State.[154] The pathway from civil war to the kind of stable, institutionalized State envisaged by international State-builders is not only a long one (and here the World Bank's suggestion of a 40-year horizon applies), but may better be characterized as an attempt to sail against a strong wind with no guarantees of forward progress.[155]

SECTION 7

Implications for Global Security

Today's conflict dynamics are strongly influenced by (and participate in) a broader set of geopolitical trends that will determine the world's peace and security landscape for the coming 30 years. This section analyses four major global trends and how they will impact the risks of new or different conflicts in the immediate and more distant future: (1) demographic shifts, (2) growing inequalities, (3) the impact of AI-driven technologies. and (4) climate change. Together, these trends have helped fuel a global retreat from many of the multilateral institutions and processes formed at the end of the Second World War and expanded during the post-Cold War era. Despite clear evidence that the world's security risks are more interdependent and globally networked, multilateral institutions today appear less relevant and empowered to address them.

7.1 Demographic shifts

Even as the rate of global population growth slows, the world's population is becoming larger, older, and more urban.[156] The world population is forecasted to leap to 8.8 billion by 2035, with huge concentrations of growth in Africa and parts of Asia. This is already leading to a disparity between high- and low-income countries: wealthy countries like Japan and Germany are ageing, with median ages set to reach around 50 years by 2035, whereas poorer countries experiencing rapid population growth (e.g. Somalia, Afghanistan) are set to have an average age under 25 years.[157] Demographic pressures on Russia and China are also becoming serious national policy issues, with potential implications for how they relate to the multilateral system. This means the bulk of people entering the workforce for the first time will be in countries already struggling to create new jobs in the modern global economy, due to poor infrastructure, limited education, ineffective governance systems, and chronic lack of opportunity for women.

The world's population is also increasingly living in cities. More than four billion people currently live in urban areas, and some projections suggest that two-thirds of the world (close to seven billion people) will live in cities by 2050.[158] On the one hand, urbanization is correlated with strong economic growth: populations urbanize as they get richer. This creates a positive feedback loop, given that urbanized societies tend to generate higher density economic activity, reducing inefficiencies and maximizing human labour.[159] But it also has significant impacts on livelihoods: agricultural employment tends to fall with urbanization, while informal economies in rapidly sprawling slums tend to thrive.[160]

There is some evidence that these demographic shifts are increasing the risks of violent conflict. High levels of visible inequalities in cities, particularly around access to services and basic goods, may lead to greater incentives to criminality and violent groups.[161] Similarly, some research has demonstrated instances where a youth bulge, when combined with poor employment opportunities, contributed to increased risks of violent conflict.[162] Sprawling and unplanned cities can become magnets for armed actors and criminal networks, given the abundance of resources that can flow through the informal sectors, prompting some to argue that urbanization itself poses a threat to global security.[163] Indeed, the fastest growing cities in the world are predominantly in sub-Saharan and central Africa, indicating a correlation (if not causation) between urbanization and conflict.[164]

The world's population is not only moving upward but also more, as discussed in Section 4.2 above. The number of international migrants is currently estimated at 272 million, or roughly three and a half per cent of the global population.[165] The number of forcibly displaced people has reached an all-time high, with increases in refugee levels in every region in the world.[166] Wars, violence or persecution forced 11 million new people to flee their homes during 2019, bringing the total number of forced displacements to nearly 80 million people (or roughly 1 per cent of the global population).[167] While the conflict in Syria continues to account for the largest forcibly displaced population, continuing large-scale displacements in the DRC, South Sudan and Yemen, and new spikes in Venezuela and Colombia, demonstrate the global trend upward. As population movements demonstrate a consistent increase over time, the combination of climate-driven displacement, conflict intractability, and the continued flows of people from less developed to developed countries suggests that population movements will continue to grow.

7.2 Inequality and exclusion

The past 30 years have witnessed an extraordinary rise in the living standards of nearly a billion people, cutting extreme poverty from 35 to less than ten per cent of the world's population. However, as discussed in Section 2.2 as a key driver of change, global economic growth has not only been uneven, but it has also dramatically increased the levels of inequality worldwide. The average income in the world's richest country is 177 times that of the poorest, with inequality growing for more than 70 per cent of the world's population.[168] These trends appear to be accelerating, as global wealth becomes increasingly concentrated and poorer populations are left further and further behind.

Rising levels of inequality are driven by a combination of factors, including a technological revolution that has helped to concentrate wealth in those countries with highly-skilled labour forces and hegemonic technology companies. Job disruption and destruction is currently affecting mainly low-skilled workers, while a small number of dominant companies have captured the bulk of the profits (see Section 2.2 regarding taxation of the digital economy). Digital innovation and artificial intelligence have opened up new economic opportunities around the world, but unequal access to them has created a "digital divide" that threatens to drive disparities still further.[169] Moreover, new technologies have transformed agricultural sectors, driving many subsistence farmers out of work and forcing them to seek new forms of employment, often in cities. And while urban areas tend to concentrate wealth and generate economic growth, they also display inequality most visibly, with extremely wealthy living alongside very poor.[170]

Unequal economic growth reflects part of a growing recognition that exclusion from access to power, opportunity, and resources constitutes one of the most important drivers of violent conflict worldwide. Building on the strong empirical research of previous studies, a UN and World Bank study in 2018 suggests that inequality and exclusion cause the kinds of deeply rooted social grievances that lead to mobilization and violence.[171] Particularly where some populations are afforded constrained access to political power, natural resources, basic services, and justice and security, contestations are far more likely to become violent at large scale. In contrast, societies that offer more opportunities for youth participation in political and economic realms tend to experience lower levels of violence.[172]

The COVID-19 pandemic is set to drive inequalities to new heights, erasing the gains of the past decade and driving as many as 150 million people into extreme poverty by 2021, many in countries that already have high poverty rates.[173] Indeed, the rapid acceleration of the use of AI-driven technologies during the pandemic – from monitoring curfews to telemedicine – could presage a far quicker shift towards machines replacing humans, leading to further shocks to global employment.[174] When combined with the pressures of climate change (discussed below), the pandemic may put the goal of ending poverty by 2030 well out of reach and may, in fact, drive global poverty rates to seven per cent of the world population. The risks of new conflicts in this context would grow significantly.

7.3 New technologies

New technologies are often heralded as both pandora's box and a panacea for today's most pressing risks. On the one hand, the convergence of AI with affective computers, cyber, biotechnology, and robotics can easily be weaponized and/or create new risks of large-scale conflicts. On the other, well-harnessed technology could create millions of new jobs, feed the world's hungriest populations, and potentially even reverse many of the impacts of climate change. Making accurate predictions in an age of accelerating technological change is extraordinarily difficult, but three trends are important to highlight in the peace and security context: (1) how AI will change the way war itself is conducted, (2) the ways AI may drive risks based on distrust, and (3) possible escalations around the race to dominate the AI realm.

AI on the battlefield

AI connects three battle domains in an unprecedented manner: the physical, informational, and psychological.[175] On the physical battlefield, intelligent machines will identify targets, deploy swarms of weaponized robots, and run complex autonomous weapons systems with minimal human involvement.[176] Here, human-machine collaboration – already in trials in some militaries – may dramatically alter how military interventions are conducted on ground and by air.[177] Information will flow through AI-driven programmes, connecting space-based systems to cyber capabilities, potentially deploying adversarial data (poisoning) against the enemy.[178] Machines will monitor large populations, looking to manipulate group psychology via "cognitive hacking" in order to drive an advantage.[179]

The potential for AI to dominate warfare has generated an arms race amongst major powers trying to gain an edge in emerging technologies. China has prioritized the development of an independent and competitive AI technology system, in order to compete with the US and other global leaders.[180] Russia has indicated that AI development should be a crucial priority to maintain its role in great power competition.[181] And US military officials have highlighted that AI is already transforming the way America approaches the issue of warfare.[182] Some experts have warned that this arms race may present its highest risk of escalation into a Third World War, though perhaps the more measured analysis would suggest that the AI race is similar in many ways to the nuclear race of several decades ago: the very competition to build up capacities to secure the national interest has the effect of making all sides feel less secure, thus driving even greater competition.[183]

Cyber vulnerabilities

As the world has become more urbanized, cities have also become reliant on AI-driven technologies and cyber infrastructure to function, as discussed in Section 5.3 on smart cities. This creates enormous efficiencies and the ability to provide far more effective services to large populations, but it also exposes new risks. Over the past three years, European States have grappled with cyberattacks on health, telecommunications, and energy sectors, while persistent attacks on US systems have put into question the security of elections and social media platforms. In the near future, cities will be composed of networked systems that control self-driving cars, drone-filled airports, robotically monitored drinking water, and homes that monitor the health of their inhabitants. Nefarious actors capable of hacking such systems could potentially poison millions, shut down major production lines, and even affect the production of life-saving medicines (including vaccines).[184]

Trust deficits

AI-driven technologies are contributing to a global trust deficit, undermining public opinion in institutions and potentially leading to greater risks of escalation into conflict.[185] As noted in Section 5.2 above, AI-backed disinformation campaigns have already shown enormous promise in influencing public opinion, such as a sprawling Russian-backed effort within Western publications, or the most recent efforts by right-wing extremists to undermine the 2020 US elections.[186] Looking forward, the creation of "deep fakes" could easily lead entire populations to believe a world leader had declared war, or that a soldier had intentionally targeted children, even if neither event took place.[187] Broadly, the impact of these technologies will be to weaken the legitimacy of governments, build centres of authority beyond state control, and potentially create new sources of tension and conflict. Worryingly, the pace of change in these areas is rapidly outpacing multilateral efforts to influence them: the UN has essentially had no processes or forums to address cybersecurity, social media-driven conflicts, or the use of technology to undermine infrastructure across national boundaries.

Echo chambers

Paradoxically, the greater interconnectivity afforded by new technology appears to be leading to more exclusionary, identity-based politics at a global level. Particularly in the past four years, political leaders have found that appeals to identity, ethnic homogeneity, and hypernationalism offer a useful set of tools to mobilize supporters and consolidate political influence. Growing access to information, combined with deepening segregation across media outlets along political lines, means that hard-liner positions find powerful echo chambers. As noted in Section 5.2, social media platforms driven by algorithms that push for greater revenues have amplified those echoes, driving online radicalization to unprecedented levels while undermining trust in traditional news networks.[188] This has contributed to the rapid rise of populism across major Western countries, driven by hostility towards elites, distrust of institutions, and the kind of anti-immigrant xenophobia that can easily escalate into violence. Similarly, exclusionary religious identities have increasingly shaped nationalist discourses in the Middle East, North Africa, and indeed Russia.[189]

Taken together, the impacts of new technologies mean that change is happening at a pace that outstrips human capacities to adapt quickly, driving greater uncertainties about basic wellbeing and security, and a consequent shift towards the familiar (identity politics) as a refuge from a rapidly approaching set of global shifts. The result has been a far more deeply polarized world, with deeply segregated populations unwilling to find mutual sources of information or common political ground.

A key aspect of the shifts described above is that they have brought great powers into more direct competition with each other, potentially endangering the long period in which the globe has enjoyed a near-total absence of inter-State conflict.

7.4 Climate-security

Across all of the above areas, there is a growing recognition of the role of climate change in exacerbating conflict risks.[190] Climate-related changes in transboundary water resources, food security, sea levels, flood risks and migration patterns are already impacting the stability of many States and will require large-scale adaptation and mitigation.[191] As noted in Section 4.2, climate change can be a break on development if policy approaches are not developed and implemented early. Some are warning of impending "climate wars," driven by a dramatic shortfall in key resources as the world overheats and the possibility of competition escalating into direct confrontation between States.[192] This section briefly considers some ways in which climate change is impacting the risks of violent conflict.

Competition over resources

Global changes in weather patterns are already having significant direct impacts on major resources, such as drinking water,[193] the waters of the major rivers,[194] arable land,[195] and forests.[196] In some cases, a fairly direct causal link between changing resources and conflict can be identified, such as where climate-related drought reduces the availability of cattle and land, triggering conflict.[197] Many of the most direct impacts are shocks to agricultural production in fragile settings, where droughts, floods, heatwaves, or cyclones may disrupt production or contribute to significantly reduced yields and food insecurity.[198] There is strong evidence in some settings that less rainfall is typically associated with lower yields,[199] and one study found that the risks of violent conflict in Sahelian countries were correlated with changes in rainfall the previous year.[200] A study of sub-Saharan Africa found that areas experiencing sustained droughts were more likely to see civil conflict, as economic grievances became more pronounced.[201] While this research helpfully speaks to the impact of drought and desertification on societies, it tends to suffer from an overreliance on neo-Malthusian assumptions about population growth and dwindling resources.[202]

Shifting populations

Global warming has also had a significant impact on population movements as noted above on human mobility, with some secondary impacts on conflict risks. In South Sudan, there is a direct correlation between rising temperatures and violent competition between the cattle herding communities, which depend upon flooding Nile waters for their survival.[203] Across East Africa, environmentally-driven changes to vegetation and precipitation are a contributing factor in the escalation of pastoral conflicts, cattle raiding, and competition over natural resources.[204] And across the Sahel, a combination of factors, including climate-driven desertification and erratic rainfall patterns, are heightening farmer-herder tensions and contributing to increased violence levels.[205]

More broadly, climate change is contributing to a number of other factors that tend to increase population movements. In Bangladesh, for example, massive riverine erosion and extreme weather are destroying huge tracts of formerly arable land. As a result, 400,000 people per year come from rural areas to Dhaka, nearly 90 per cent of them claiming environmental causes for their relocation. An unknown number, but likely in the hundreds of thousands, have migrated to the Assam region of India, raising tensions between the two countries and causing security incidents along the common border. In such settings, the concept of "climate refugees" may not be a helpful legal term, but it accurately describes what is increasingly a large flow of people away from climate-affected areas.[206]

A risk multiplier

There is a growing consensus that climate change is a contributing factor to violent conflict but is of less direct impact than other socioeconomic and structural causes, and not connected in the simple and direct way that is often portrayed.[207] Climate change exerts an indirect and conditional effect on conflict risks, often acting as a threat multiplier by increasing the gap between wealthier communities capable of adapting to new dynamics and poorer ones that already face greater risks of instability.[208] Climate-related shocks to the economy and/or food production tend to be most acutely felt in poorer communities, exacerbating underlying grievances, reducing the opportunity costs for violence, and imposing an overall downward pressure on economic development.[209] This accords with future-oriented modeling which suggests that the combination of rising temperatures and demographic trends are likely to create greater risks of violent conflict absent improvements in political rights.[210]

These trends are set to accelerate over the next 30 years, particularly in fragile settings such as the Sahel and low-lying areas in South Asia. The Sahel is expected to experience temperature increases of more than 2.0 degrees in the coming ten years, far outstripping global averages and leading to transformations in how agriculture, urban areas, and populations are managed. Up to 70 per cent of Bangladesh's territory may be inundated by 2050 at current trends, which would trigger a massive population flow out of the country. Coral bleaching in Central America and the Caribbean could lead to near total loss of fishing livelihoods for coastal populations. If the above trends suggest one thing, it is that the past is a poor predictor of the future when it comes to climate: expect exponential, non-linear change.

7.5 Summary: Uncertainty and a possible return to great power confrontation

The above trends have combined to create a volatile and uncertain trajectory for the coming 30 years Importantly, they appear to have contributed to an increasingly blurry line between violent conflict and peacetime. Massive criminal networks in Mexico cause more deaths annually than many traditional wars but are not considered armed conflict by traditional measures. Cyberattacks from Russia into the US may constitute a more serious breach of sovereignty than a territorial incursion (in terms of damage) but the multilateral system has no formal processes to address them. As noted above, climate change may create a new class of "climate refugee", but to date the international community has no legal understanding of their status.

In parallel, the past several years have witnessed a retreat from multilateralism as major powers have embraced nationalist agendas, bypassed or ignored multilateral forums like the UN Security Council, and flouted international commitments to climate change and WMD. If the early 1990s were characterized by a proliferation of multilateral initiatives and a flourishing of international cooperation around peace and security, the current trajectory may well point in the opposite direction. Pundits have warned of a "world in disarray" where the long-standing assumptions about the centrality of liberal RBIS are now in question, where power is spread unevenly (and unstably) across a wider range of actors, many of whom have far different conceptualizations about the use of force and good governance.[211]

The combined result of these trends is a worrying risk of a return to great power confrontation without a meaningful forum to defuse tensions and reduce the risks of escalation. As major powers have retreated from multilateral commitments on WMD – and as the threats of cyberattacks have heightened the possibility of miscalculation amongst States – perhaps the greatest risk to global security is the lack of constraints on inter-State conflicts.

Developing ideas for how to transform the multilateral system to better position it to address these risks is the main challenge facing the UN today.

SECTION 8

Three Pathways

The pace of socioeconomic change, scientific discovery and technical innovation complicates distant forecasting efforts. Over a period of thirty years, the topic of climate change, for instance, has progressed from an infrequently discussed phenomenon of predominantly scientific interest to an existential threat that is forcing a profound global reflection of local and global obligations. The range of factors and actors that must be taken into account by foresight research does not lend to a parsimonious conclusion about the state of development in 2050. The three pathways developed in this section – based largely on the analysis above – offer several alternative scenarios of the future.

8.1 Assumptions (and opportunities)

There is a high degree of confidence in the following ten assumptions about the future, which serve as the basis for the three pathway scenarios elaborated below.

- In the short term, economic (and likely political) inequality will continue to increase, putting greater numbers into extreme poverty while, at the same time, putting pressure on labour markets to deliver decent work.

- With more limited concessional finance for developing countries, private finance and investment will become more important determinants of development implementation capacity.

- Wealthy countries will continue ageing, while poorer ones will continue to have younger median populations. This will lead to an expanding youth bulge in many regions already experiencing violent conflict.

- More people will migrate. The promise of greater safety, resources and opportunity will remain the key driver of global migration flows, with cities and urban centres being the primary destination for migrants.

- Climate change will contribute to a range of risks, from massive displacement in low-lying areas, large-scale loss of livelihoods, and desertification as well as contributing to an accelerated urbanization trend worldwide. Affected governments will not have the resources to address the consequences on their own.

- Technology will be one of the most powerful vectors of change as internet penetration increases and the digital commons expands. This will carry costs, notably in relation to the protection of individual, government, and corporate data, while also revealing meaningful differences in the quality of life across the world. It will also carry benefits, though it is unclear if these will be equitably shared.

- Information campaigns will play a major role in how States compete for influence, including by conflict actors using disinformation and AI-driven programmes.

- In many parts of the world, the judiciary will play an increasingly important role in assigning responsibility and obligations in the context of sustainable development, challenging the role of States and legislators.

- Civil wars will be sustained via a combination of transnational illicit networks and involvement of outside actors, making them tend to last longer than wars over the previous 30 years.

- Non-State actors will continue to play a vital role in sustaining armed conflict, complicating traditional forms of peacemaking. Global jihadist groups will remain a significant source of instability in parts of Asia, the Middle East, and Africa.

Taken together, these assumptions suggest that the response by the multilateral system – as well as effective national and local responses - will largely determine whether these trends will result in a more fragmented, isolated world, or a more networked, interdependent one.

8.2 Pathway 1: Isolationism

The global economic downturn following the COVID-19 pandemic rapidly erases any gains achieved since the 2008 crisis, leading to a sustained period of little to no growth and a growing sense amongst major powers that long-standing models of economic prosperity and expanding globalization should be rejected. Facing increasingly strident demands from their citizens to meet basic societal needs, Governments embrace populist demands for nationalism and a rejection of international cooperation, norms and standards, including the decisions and opinions of international courts and arbitrators. With a greater emphasis on localization and self-reliance, inter-State dependencies are rethought, leading to a shift in the global governance and security landscape.

Major power rivalries are further exacerbated by a perceived threat to national sovereignty and liberal alliances in the West, prompted by rising Sino-Russian influence in global institutions and in strategic parts of the developing world. International relations become increasingly transactional and ideological blocks dominate global institutions. ODA drops significantly as major donors reduce development funding in favour of domestic spending, leading to significant underdevelopment in fragile States. Multilateral cooperation wanes on terrorism, migration, climate change, conflict resolution, debt and WMD.

As the longer-term impacts of the pandemic sink in, rising debt levels lead to greater migration as people move in search of employment and security. With domestic austerity measures enacted and many governments unable to borrow, new arrivals are seen as benefitting from an already stretched social protection system.[212] Pressure intensifies on transit countries that are funded to enforce borders, and hostility grows toward migrant populations in the societies that host them. The UN, hamstrung by the lack of new contributions from major donors, can do little to assist struggling migrant populations.

As levels of inequality spike in many fragile settings, new socioeconomically-driven conflicts increase in parts of Africa, the Middle East, Latin America, and South Asia. Informal economies thrive in the absence of international trade cooperation, strengthening transnational criminal networks and contributing to larger flows of resources, people, and weapons across national boundaries, especially in the Sahel, but also from the Horn of Africa, Central America, and Central Asia.

The US retrenches by limiting cross-border investments, cutting ties with global institutions it cannot lead and that its electorate no longer prioritizes. Its departure from the global stage leaves developing countries with less access to crucial development and capital finance, slowing growth in many sectors. The effects of US withdrawal from GVCs, in favour of domestic or regional ones, are especially pronounced in Africa where the growth of a new middle class is imperilled. China, Japan, and Russia all prioritize the management of national debt, which continues to grow through the 2020s, owing to the associated costs of rapidly ageing populations in all three countries and reduced economic competitiveness as labour markets contract. Cuts to pensions and social protections for Russia's ageing population lead to significant civil unrest.

In a heavily polarized world and pressed by nationalist domestic politics, the sustainable agenda lacks focus and shifts to firefighting mode. Many governments weaken environmental standards to boost growth, accelerating global temperatures well above the 1.5-degree threshold of the Paris agreements. Conflict and international disagreement arise from unilateral climate engineering actions where traditional retaliation makes little sense. By 2040, most of Bangladesh is inundated due to rising sea levels, causing an exodus of millions of climate refugees into India, which triggers an armed confrontation between the two countries. In the Sahel, extreme weather, accelerating desertification, and resulting crop failure cause a massive surge of farmers into cities and cross-border tensions amongst the countries of the region.

With increasing friction between government and the private sector over isolationist policy priorities, the technology sector faces greater strains due to competition between the US and China, foreign technology purges and government scrutiny over data monopolization. The risk of inter-State conflict soars as major powers compete over control of AI-driven technologies and cyberattacks amongst major powers escalate into direct attempts to undermine crucial infrastructure. Dominance of critical technological industries, supply chains and natural resources sectors serve as the prevailing proxies for State-backed challenges to Western institutions and economies. Efforts to treat AI as a global public good flounder due to nationalist agendas, leading to highly unequal development of new technologies and massive populations left behind by the latest innovations.

By 2050, the risks of large-scale inter-State conflict are extremely high, while the international community has done little to check the many civil wars arising from increasing inequalities and poor economic growth. With global distrust at all-time highs, the UN Security Council remains largely unable to function as a crucial clearinghouse for addressing inter-State tensions. In fact, the UN has dramatically reduced the arenas in which it is a central player in global governance, significantly withdrawing from conflict resolution, focusing on a small number of African peacekeeping contexts, and playing a marginal role in issues like counter-terrorism, nuclear proliferation, and international trade. The era of multilateral treaties now comprehensively over, UN-brokered agreements are mostly toothless compacts or aspirational statements of principle, while the more meaningful security and development arrangements are hashed out in bilateral contexts or within regional blocs (e.g. EU, ASEAN). Worryingly, even existing multilateral treaties become increasingly moribund and unable to influence state behaviour: major nuclear powers flaunt the Non-Proliferation Treaty, while a growing number of States increase efforts to achieve WMD; international and regional trade agreements gradually disintegrate amidst nationalist agendas, causing a further global economic downturn that means recovery from the pandemic is pushed further beyond reach; and global commitments to counteracting climate change remain unimplemented.

In this context, the need to dramatically reform the UN runs into the nationalist agendas that tend to prevent change. Efforts to reform the Security Council are met with veto threats from the Permanent Five members; moves to broaden the mandate of the UN Peacebuilding Architecture fall flat without united Member State support; and rapidly developing threats around cyber and AI-driven technologies are seen as beyond the scope of the UN's existing structures. Over time, this contributes to a downward trend in national contributions to the UN as Member States direct resources and political capital to other more vibrant forums, leading to a vicious cycle of an underfunded, underperforming UN poorly placed to deal with new shocks at the global level.

8.3. Pathway 2: Regionalization

The post-pandemic economic crisis causes the world's major powers to reduce their global ambitions, focusing instead on building regional spheres of influence to sustain future growth and meet the needs of their populations. Regional supply chains are thought to be more resilient to future shocks and become the priority for many leading industrial countries. In some cases, regional power is constructed along lines of ethnicity/identity, such as Iran's influence across the Shia communities of the Middle East, or Russia's push to control swathes of Central Asia. In other cases, it is driven by ideology and shared values, such as are demonstrated in the creation of the Quadrilateral Security Dialogue (Quad) or recent discussions on expanding NATO includes countries in Asia. The race for regional dominance in some regions leads to the escalation of tensions, including between the nuclear powers of India and Pakistan, and between China and a Western coalition fighting for control of the Spratly Islands in the South China Sea.

With regional blocks dominating regulatory and standard-setting, efforts are made to boost investor confidence and shore up the absorptive capacity of developing countries. With less incentive to exploit polarization between specific States, global powers focus on more localized conflict and insecurity concerns, including disinformation.

At times, regional cooperation generates positive results. Development finance increases as governments compete for influence within and across regional spheres, with investment supporting clustered regional value chains (and a distancing from GVCs). With greater pooling of regional resources, digital divides lessen and more local ownership of technology, data, and production occurs.

Formal regional burden-sharing sees positive results in other key areas, including crisis response, migration and refugee management and protection, development needs and security. Commitments across South Asian countries to collaborate on climate change responses (including a 20-year ASEAN-led plan to climate-proof development) leads to a significant improvement in responses, including collective decisions about the use of water and littoral territories. In Central America, a collective regional agreement across governments to curb the flow of weapons and drugs leads to a gradual diminishment in the roles of violent criminal networks.

At other times, regionalization leads to even greater regional inequality worldwide. Some regions suffer worse risks of conflict than others. In West Africa and the Horn, the combination of poor economic growth, massive urbanization, and climate-driven conflicts lead to stagnation and cycles of conflict. Regional entities like ECOWAS are able to prevent major escalations, but growing inequalities and poor governance levels within many countries leads to uprisings in Cameroon and Chad, while Mali and northern Nigeria remain mired in conflict for decades. Looking inward to their own regions, major donors offer only superficial assistance, while UN peacekeeping must draw increasingly from neighbouring countries for support. These security setbacks mean that countries with low levels of technological development fall far behind the regional leaders, which are unable to address the deficiencies in neighbouring countries. AfCFTA registers a few initial successes owing to early momentum in the 2020s, putting in place a number of agreements on tariffs, but remains stagnate thereafter.

On global issues like climate change mitigation, nuclear weapons, and international development, regionalism falls well short of what is needed to prevent escalating risks of conflict. Escalations within regions are treated as a backyard issue by the multilateral system, with the UN Security Council largely irrelevant to addressing regional conflict dynamics. As climate change accelerates risks in South Asia, Sahelian Africa, and the northern corridor of Central America, related conflicts are largely ignored, leading to growing numbers of socioeconomically-driven conflicts. By 2050, international actors refer to “failed regions” to describe those that have succumbed to recurrent cycles of conflict and poor growth, though the multilateral system has few tools to address them.

Changes in the multilateral system largely mirror trends towards greater regionalization, curtailing the more global ambitions of the Organization. Building on the regional strategies that arose from the 2018 reform process, the UN further decentralizes itself, expanding its offices in West Africa, Central Africa, the Horn, and Western Asia, while building new regional hubs to support its work in Central America, the Middle East, and South Asia (the latter requiring far more peace and security work as the impacts of climate change create new risks of mass displacement and conflicts over resources). By 2040, however, this has rendered the UN more of an archipelago than a coherent organization, with widely disparate approaches and highly unequal levels of funding depending on the region, though often more meaningful engagement by regional actors. Central Africa becomes a largely neglected region in terms of donor support, while the Horn of Africa is increasingly seen as a battleground for influence amongst the Gulf countries. Europe, concerned more with maintaining its own regional coherence, draws away from more serious investment in conflict and fragile States, leading to some regions falling far short of their SDG benchmarks.

While regionalization benefits the UN in terms of its partnerships with important actors like ASEAN, SADC, ECOWAS and others, it also results in a weakening of the UN’s global norm-setting, especially in areas of WMD, nuclear proliferation, climate change, and new technologies. Efforts to build consensus around AI as a global good, to put teeth into the Paris climate accords at a global level, or to advance non-proliferation goals founder as regional actors see few benefits in tying their hands. In particular on the issue of climate change, South Asian, West African and Central American regional organizations demand greater economic support as saltwater inundation, erratic rainfall and rising sea levels create a series of economic shocks that are not felt as acutely elsewhere. But this support is not forthcoming as the mantra “regional solutions to regional problems” creates few incentives to invest beyond the immediate neighbourhood.

8.4. Pathway 3: Networks

Starting in 2021, the tide of nationalism that had risen for several years begins to recede, helped in large part by a recognition amongst a core group of leaders of the need to respond to global challenges in a systemic, collective manner via what Secretary-General Guterres called "networked multilateralism."[213] The US and China spearhead a ground-breaking agreement to tackle climate change together, holding all major emitters to the same robust standards they set for themselves, supported by a wave of strategic litigation from civil society in domestic constituencies that adds considerable momentum. This cascades into what are called the New Global Agreements in which a plurality of UN Member States commit to addressing the major risks to global wellbeing, including: agreement to full denuclearization by 2050, a commitment to decolonizing international assistance, agreement to treat artificial intelligence as a global public good, and commitments to inclusive, sustainable forms of growth, including a global taxation regime on the digital economy and debt relief.

These coalesce into a new set of principles to guide the UN Charter, which include:

- Addressing political and economic inequality is a primary goal of multilateralism;
- Sustainability and inclusion are priorities above growth – development is to be carbon neutral and based on a clear path towards social and political equity;
- The future wellbeing of youth is as important as the present wellbeing of populations;
- Access to global public goods, such as the internet and AI-driven technology, is a human right;
- The UN is committed to reflecting the views of people as much as States, with meaningful forums for the global population to set the agenda.

With this as a foundation, the multilateral system becomes less of a State-centred competitive marketplace and more of a networked set of institutions, people and processes. Partnership opportunities become unmoored from geographic territory as forums are increasingly created via massive social media platforms and AI-generated programmes to allow civil society organizations and regional entities to participate as meaningful actors in global decision-making (perhaps even participating in a new form of treaty-making or signing off on global deals). These platforms are also used to monitor transparent accountability metrics. IFIs are brought into closer synergy with political, environmental and human rights organs of the UN, leading to more sustainable and inclusive forms of international assistance and development.

Significant pooled funds are set aside to manage global shocks, such as pandemics, financial crashes, or large-scale wars. To curb risky lending and debt ratios, new regulations are introduced to ensure full transparency in lending to States and major State industries that could generate liabilities for the public purse.

This does not come without challenges. States themselves become increasingly challenged, by stakeholder activism and judicialization; increasing local governance and connected cities; and newly empowered non-State actors, flush with technological advances and their own networks of influence. Hackers (including with State backing) drive disinformation campaigns and attack critical infrastructure, at times bringing States into direct confrontation with each other. Many States attempt to be freeriders on climate commitments, benefitting from the overall emissions reductions without themselves reducing carbon emissions. Nuclear powers are reticent to lose a card that has kept them in the game for nearly 100 years. The forces of nationalism and self-interest work their erosive forces on global cooperation. But in a world that is becoming more and more of an interdependent network, the only viable response by the multilateral system is to become a network itself.

By 2050, the multilateral system looks more like a spider's web than a 38-story building. Its strands stretch from the global to regional to local levels, capable of responding at scale to major shocks. It has strong tendencies towards decentralization of power, though is able to take decisions quickly and with the legitimacy that comes by tapping into significant portions of the globe. It develops a strategy to address technological advances (including privacy and the ownership of data) collectively, with strong norms on how cyber and AI are governed and distributed. And perhaps most importantly, this network is far more resilient and responsive in the face of massive new shocks to the system: global pandemics, hacks of the financial system, nuclear detonations, sudden loss of staple crops worldwide, rapidly accelerating sea-level rises, and inter-State war.

It is extremely improbable that the world will follow the networked multilateralism pathway fully. It is likely too much to ask, in the context of a global recession, that Member States will have the vision to see the longer-term benefits of collective action. But the concept of a network as opposed to isolated islands of States offers a sense of how today's leaders could push back on the forces of hypernationalism and attempt a more interconnected, less State-centric approach to global governance.

References

[1] Christopher A. Whytock, "Domestic Courts and Global Governance," *Tulane Law Review* 84, 67 (2009); Kennette Benedict, “Global Governance,” *International Encyclopedia of the Social & Behavioral Sciences* eds. Neil J. Smelser and Paul B. Baltes (Amsterdam: Elsevier, 2001).
[2] Dominique Strauss-Kahn Remarks, "Video remarks at the International Monetary Fund and World Bank annual meeting," 7 October 2010, https://www.c-span.org/video/?295875-1/dominique-strauss-kahn-remarks.
[3] United Nations Development Programme, *China, the Millennium Development Goals, and the Post-2015 Development Agenda* (New York: UNDP, 2015); Thomas Piketty et al., "Income inequality is growing fast in China and making it look more like the US," *LSE Business Review*, 1 April 2019, https://blogs.lse.ac.uk/businessreview/2019/04/01/income-inequality-is-growing-fast-in-china-and-making-it-look-more-like-the-us/.
[4] Ian Goldin and Tiffany Vogel, “Global Governance and Systemic Risk in the 21st Century: Lessons from the Financial Crisis,” *Global Policy* (2010).
[5] Tony Addison et al., "Is Global Inequality Rising or Falling?," *UNU-WIDER Policy Brief* 2019/2 (2019), https://www.wider.unu.edu/publication/global-inequality-rising-or-falling.
[6] Simon Romero and John M. Broder, "Progress on the Sidelines as Rio Conference Ends," *The New York Times*, 23 June 2012; It is worth noting the contrast with the assessment of the then serving UN Secretary-General, Bank Ki-Moon, which could not be greater: “Let me be clear. Rio+20 was a success.” Ban Ki-moon, "Remarks to General Assembly on outcome of Rio+20 United Nations Conference on Sustainable Development," 28 June 2012, New York, https://www.un.org/sg/en/content/sg/statement/2012-06-28/secretary-generals-remarks-general-assembly-outcome-rio20-united.
[7] See Figure 3 in Section 3.2, which refers specifically to low-income countries eligible for the World Bank’s Debt Service Suspension Initiative (DSSI).
[8] The World Bank notes that lending from private creditors was up fivefold since 2010. Obligations to private creditors totaled $102 billion at the end of 2019. World Bank, *International Debt Statistics 2021* (Washington DC: International Bank for Reconstruction and Development / The World Bank, 2020).
[9] Sarah Ayres Steinberg, "The High Cost of Youth Unemployment," Center for American Progress, 5 April 2013, https://www.americanprogress.org/issues/economy/reports/2013/04/05/59428/the-high-cost-of-youth-unemployment/.
[10] James McBride and Andrew Chatzky, "The Group of Twenty," Council on Foreign Relations, 10 June 2019.
[11] UN Development Programme, *Humanity Divided: Confronting Inequality in Developing Countries* (New York: UNDP, 2015).
[12] United Nations Department of Economic and Social Affairs and the United Nations Development Programme, *Synthesis of National Reports for Rio+20* (New York: United Nations, 2012).
[13] "From climate crisis to real prosperity," *BBC Radio 4*, 26 December 2020, https://www.bbc.co.uk/programmes/m000qkms. Other frequently used terminology includes ‘purpose and profit'. See, Judith Rodin and Saadia Madsbjerg, *Making Money Moral: How a New Wave of Visionaries Is Linking Purpose and Profit* (Philadelphia: Wharton School Press, 2021).
[14] This was a central theme of a recent landmark report from the UN Economist Network, which stressed that “when inequality is perceived as underlying a system that is unfair, people respond by losing confidence in institutions, with consequences for political stability.” UN Economist Network, *Shaping the Trends of Our Time* (New York: United Nations, 2020), https://www.un.org/development/desa/publications/wp-content/uploads/sites/10/2020/10/20-124-UNEN-75Report-Full-EN-REVISED.pdf.
[15] Facundo Alvaredo et al., *World Inequality Report 2018* (Paris: World Inequality Lab, 2017).
[16] UN Development Programme and the Oxford Poverty & Human Development Initiative, *Global Multidimensional Poverty Index 2019* (New York: UNDP/OPHI, 2019).
[17] "Deputy UN chief pushes Security Council on global ceasefire, to fight ‘common enemy'," *UN News*, 3 November 2020, https://news.un.org/en/story/2020/11/1076792.
[18] See, United Nations and the World Bank, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict* (Washington DC: World Bank, 2018).
[19] "G20 Leaders' Declaration: Building Consensus for Fair and Sustainable Development," 1 December 2018, Buenos Aires, http://www.g20.utoronto.ca/2018/2018-leaders-declaration.html.
[20] Daniel Kang, "Better Gardening: Reconsidering Optimism and Cynicism towards the International Order," *Cambridge International Law Journal* (2021).
[21] Bruce Jones and Susana Malcorra, *Competing for order: Confronting the long crisis of multilateralism* (Washington DC: Brookings, 2020).
[22] Ibid.
[23] International Institute of Strategic Studies, *Strategic Survey: The Annual Assessment of Geopolitics 2020* (London: Routledge, 2020).

[24] António Guterres, "Tackling the Inequality Pandemic: A New Social Contract for a New Era," Remarks at the Nelson Mandela Annual Lecture, 18 July 2020.
[25] Richard Haas, *A World in Disarray: American Foreign Policy and the Crisis of the Old Order* (New York: Penguin, 2018); G. John Ikenberry, "The end of the liberal international order?," *International Affairs* 94, 1 (2018): 7–23.
[26] United Nations and the World Bank, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict* (Washington DC: World Bank, 2018).
[27] Eleonore Pauwels, *The New Geopolitics of Converging Risks: The UN and Prevention in an Era of AI* (New York: United Nations University, 2019).
[28] James A. Goldston and Erika Dailey, *Strategic Litigation Impacts: Insights from Global Experience* (New York: Open Society Foundations, 2018).
[29] Christopher A. Whytock, "Domestic Courts and Global Governance," *Tulane Law Review* 84, 67 (2009).
[30] Ibid.
[31] Task Force on Inequality and American Democracy American Political Science Association, *American Democracy in an Age of Rising Inequality* (Washington DC: American Political Science Association, 2004).
[32] United Nations High Commissioner for Human Rights, "The right to privacy in the digital age," United Nations, 3 August 2018, A/HRC/27/37.
[33] UN Economist Network, *Shaping the Trends of Our Time* (New York: United Nations, 2020).
[34] Amina J. Mohammed, "Remarks at the Third Roundtable under Rebirthing the Global Economy to Deliver Sustainable Development," 24 November 2020, Virtual Conference, https://webtv.un.org/search/amina-j.-mohamed-deputy-secretary-general-on-rebirthing-the-global-economy-to-deliver-sustainable-development/6212002104001; Amina Mohammed, Twitter Post, 3 Apr 2020, 10:08 PM, https://twitter.com/AminaJMohammed/status/1246258352973283328; Amina Mohammed, "Remarks at the European Union Meeting on G5 Sahel: COVID-19 Threatens Hard-Won Development Gains as Emergency 'Unfolds before Our Eyes," 28 April 2020, Virtual Conference, DSG/SM/1405.
[35] Independent Group of Scientists Appointed by the Secretary-General, *Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development* (New York: United Nations, 2019). https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf.
[36] Colin Andrews et al., *The State of Economic Inclusion Report 2021: The Potential to Scale* (Washington, DC: World Bank, 2021): 22.
[37] Ibid; International Monetary Fund, "A Crisis Like No Other, An Uncertain Recovery," *World Economic Outlook Update*, (2020); International Labour Organization, "COVID-19 and the world of work," *ILO Monitor* 5 (2020); United Nations, *COVID-19 and Universal Health Coverage* (New York: United Nations, 2020).
[38] United Nations, *Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19* (New York: United Nations, 2020).
[39] António Guterres, "Scale up investment in Universal Health Coverage and in stronger health systems," 7 October 2020, https://www.un.org/en/coronavirus/scale-investment-universal-health-coverage-and-stronger-health-systems.
[40] Global health coverage means participation in a financial protection scheme that covers the costs of health care. Adam Wagstaff et al., "Measuring Progress towards Universal Health Coverage: With an Application to 24 Developing Countries," *World Bank Policy Research Working Paper* 7470 (Washington DC: World Bank, 2015).
[41] Peter Daszak et al., "Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services," IPBES Secretariat (2020), https://ipbes.net/pandemics; The respected medical journal *The Lancet* also finds that pandemic frequency is on the rise. "A Pandemic Era," *The Lancet Planetary Health* 5, 1 (2021).
[42] International Organization for Migration and United Nations Economic and Social Commission for Western Asia, *Situation Report on International Migration in the Arab Region 2019* (2020).
[43] María Fernanda Espinosa, "Summary by the President of the General Assembly of the Interactive Multi-stakeholder Hearing as part of the preparatory process for the United Nations High-level Meeting on Universal Health Coverage," 29 April 2019, New York.
[44] United Nations Conference on Trade and Development, *Trade and Development Report 2018: Power, Platforms and the Free Trade Delusion* (Geneva: UNCTAD, 2018).
[45] John Linarelli, "What Do We Owe Each Other in the Global Economic Order?: Constructivist and Contractualist Accounts," *Journal of Transnational Law and Policy* 15 (2006).
[46] United Nations Development Programme, *Humanity Divided: Confronting Inequality in Developing Countries* (New York: UNDP, 2013).
[47] United Nations Conference on Trade and Development, "Addressing systemic issues: Strengthening the coherence and consistency of multilateral financial, investment, trade and development policy," United Nations, 2 December 2020, TD/B/EFD/4/2.
[48] "IMF loans bailing out private lenders during the COVID-19 crisis," Jubilee Debt Campaign, 16 July 2020.
[49] Natalie Kenway, "'Perfect storm' will accelerate ESG assets to top $53trn by 2025," *ESG Clarity*, 25 January 2021, https://esgclarity.com/perfect-storm-will-accelerate-esg-assets-to-top-53trn-by-2025/.
[50] Jeremy Bulow et al., "The Debt Pandemic," *IMF Finance & Development* (2020).
[51] Bruno Bonizzi et al., *Private lending and debt risks of low-income developing countries* (London: ODI, 2020), https://www.odi.org/publications/17012-private-lending-and-debt-risks-low-income-developing-countries.
[52] Evan Girvetz, "De-risking agricultural investment in Africa," *Financial Times*, 14 August 2018.

[53] Julian Schumacher et al., "Sovereign Defaults in Court," *European Central Bank Working Paper* 2135 (2018).
[54] Recent public focus spotlights advantages gained in part through past exploitation and systemic racism.
[55] SDG 10.3 reads in full: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.
[56] International Institute of Strategic Studies, *Strategic Survey: The Annual Assessment of Geopolitics 2020* (London: Routledge, 2020): 45.
[57] Even with better policies, debt crises and sovereign defaults are bound to happen. The cost of such crises could be attenuated by putting in place an international debt resolution mechanism, which would allow a speedy, equitable and transparent debt restructuring process. See, United Nations Conference on Trade and Development, "The Impact of the Financial and Economic Crisis on Debt Sustainability in Developing Countries," *UNCTAD Secretariat Note* (2009).
[58] Joseph Cotterill, "Cabling Africa: the great data race to serve the 'last billion'," *Financial Times*, 31 January 2021.
[59] The idea of a single definition of RBIS is contested. The term is considered imprecise and dated. It is used interchangeably with multilateralism and global governance. Malcolm Jorgensen, "China is overturning the rules-based order from within," *The Interpreter*, 12 August 2020; Malcolm Chalmers, "Which Rules? Why There is No Single 'Rules-Based International System'," *RUSI Occasional Papers* (2019).
[60] Lisa Friedman, "Trump Serves Notice to Quit Paris Climate Agreement," *The New York Times*, 4 November 2019.
[61] "Veteran Chinese Diplomat Warns on South China Sea Ruling," *Wall Street Journal*, 6 July 2016.
[62] Vladimir Putin, "Presidential Address to the Federal Assembly," 15 January 2020, St Petersburg, Russia, http://en.kremlin.ru/events/president/news/62582.
[63] "Netanyahu: An ICC investigation of Israel would be 'pure anti-Semitism'," *Times of Israel*, 6 February 2021.
[64] Dieter Ernst, "Catching Up in a Technology War: China's Challenge in Artificial Intelligence," Center for International Governance Innovation, 17 June 2020, https://www.cigionline.org/articles/catching-technology-war-chinas-challenge-artificial-intelligence.
[65] Liu Hua, "There is no one-size-fits-all model for human rights protection, and modernization is not Westernization," Permanent Mission of the People's Republic of China to the United Nations Office at Geneva and Other International Organizations in Switzerland, 27 February 2020, http://www.china-un.ch/eng/dbtyw/rqrd_1/thsm/t1750226.htm.
[66] David O. Shullman, "Protect the Party: China's growing influence in the developing world," The Brookings Institution, 22 January 2019, https://www.brookings.edu/articles/protect-the-party-chinas-growing-influence-in-the-developing-world/.
[67] Malcolm Jorgensen, "China is overturning the rules-based order from within," *The Interpreter*, 12 August 2020.
[68] United Nations, The Millennium Development Goals Report 2015 (New York: United Nations, 2015).
[69] "1 per cent of humanity displaced: UNHCR Global Trends report," United Nations High Commissioner for Refugees, 18 June 2020; Jeff Beradelli and Katherine Niemczyk, "'We have to go': Climate change driving increased migration from Central America, *CBS News*, 17 February 2021.
[70] "With refugee resettlement at a record low in 2020, UNHCR calls on States to offer places and save lives," UN High Commissioner for Refugees, 25 January 2021.
[71] Joseph P. Biden, "Executive Order on Rebuilding and Enhancing Programs to Resettle Refugees and Planning for the Impact of Climate Change on Migration," 4 February 2021, The White House, Washington DC, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/02/04/executive-order-on-rebuilding-and-enhancing-programs-to-resettle-refugees-and-planning-for-the-impact-of-climate-change-on-migration/.
[72] Migration Data Portal, "Environmental Migration," last accessed 27 February 2021, https://migrationdataportal.org/themes/environmental_migration.
[73] Kanta Kumari Rigaud et al., *Groundswell: Preparing for Internal Climate Migration* (Washington DC: International Bank for Reconstruction and Development / The World Bank, 2018).
[74] Julie Turkewitz, "Colombia Makes 'Historic' Decision to Grant Legal Status to 1.7 Million Venezuelan Migrants," *The New York Times*, 8 February 2021, https://www.nytimes.com/2021/02/08/world/americas/colombia-venezuela-migrants-duque.html.
[75] Jean-Claude Berthélemy et al, "Aid and Migration: Substitutes or Complements?," *World Development* 37, 10 (2009).
[76] Melissa Siegel, "Throwing development money at the 'migration problem' – is it completely misguided?," *Mignex*, 15 November 2019, https://www.mignex.org/publications/throwing-development-money-migration-problem-it-completely-misguided.
[77] United Nations General Assembly, "Resolution adopted by the General Assembly on 19 September 2016," United Nations, 3 October 2016, A/RES/71/1.
[78] Elaine Lebon-McGregor, "A History of Global Migration Governance: Challenging Linearity," *Amsterdam Institute for Social Research Working Paper* 167 (2020).
[79] "The Global Compact for Safe, Orderly and Regular Migration," endorsed by the UN General Assembly on 19 December 2018.
[80] Regional Review Conference of the Global Compact for Safe, Orderly and Regular Migration in the Arab Region, 23-25 February 2021, Beirut-Cairo.
[81] State of Libya, "The official position of the State of Libya on the non-binding GCM adopted in Marrakech in 2018," Regional Review of the Global Compact for Safe, Orderly and Regular Migration (Tripoli: GNA Ministry of Foreign Affairs, 2020); Regional Review Conference of the Global Compact for Safe, Orderly and Regular Migration in the Arab Region, 23-25 February 2021, Beirut-Cairo.

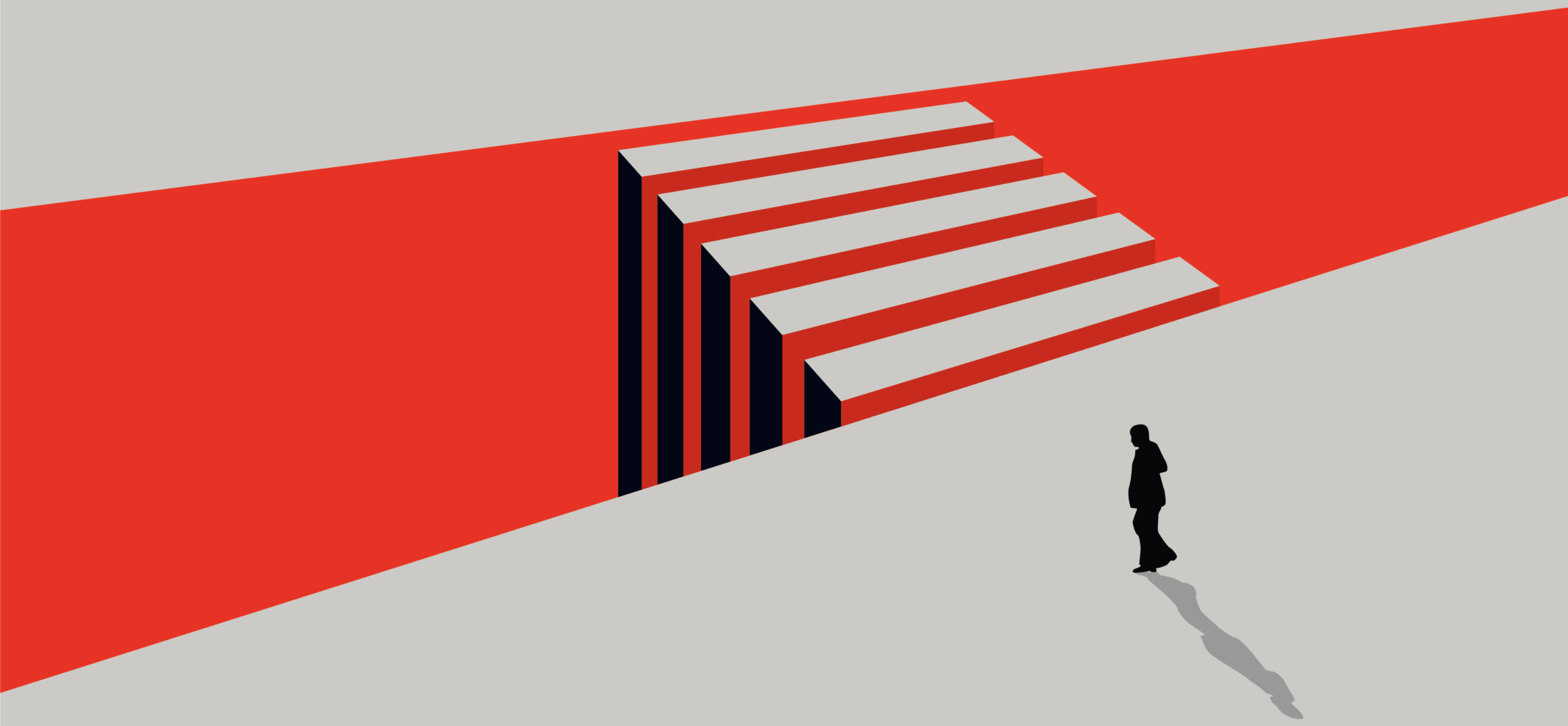
[82] Kathryn Allinson et al., "GCM Commentary: The Legal Status of the UN's Global Compact for Safe, Orderly and Regular Migration in International and UK Law," Refugee Law Initiative, 31 January 2019, https://rli.blogs.sas.ac.uk/2019/01/31/gcm-commentary-the-legal-status/.
[83] Alistair Burt, "Statement on the Global Compact for Migration," 10 December 2018, London, https://questions-statements.parliament.uk/written-statements/detail/2018-12-10/HCWS1163.
[84] Ian Johnstone and Joshua Lincoln, "How to Make Diplomacy More Effective—and Inclusive—in the New Age of Pluralism," *World Politics Review*, 14 January 2021, https://www.worldpoliticsreview.com/articles/29352/how-to-make-diplomacy-more-effective-and-inclusive-in-the-new-age-of-pluralism.
[85] The G- constellation is one such forum and it has had enduring relevance on the global stage, even if its record follows high peaks and low troughs.
[86] Colleen Thouez, "Cities as Emergent International Actors in the Field of Migration," *Global Governance: A Review of Multilateralism and International Organizations* 26, 4 (2020).
[87] Decentralized development cooperation (DDC) represents an important source of development funding for local authorities and an innovative form of participatory development cooperation often delinked from the politics of national governments. This form of subnational cooperation, while impacted by the broader geopolitical environment, is carried out much more flexibly, taking local needs as the point of departure.
[88] DDC entails the transfer of financial and technical resources from one subnational authority to another. Between 2005 and 2017, DDC grew by 35% according to recent OECD estimates, representing a total of USD 2.3 billion in 2017. See, OECD, "Decentralised development co-operation: Unlocking the potential of cities and regions", *OECD Development Policy Papers* 22 (Paris: OECD, 2019).
[89] Françoise Huang, "The world is moving East, fast," Euler Hermes, 18 January 2021, https://www.eulerhermes.com/en_global/news-insights/economic-insights/the-world-is-moving-east-fast.html.
[90] Helen Clark, "Speech at the UN Private Sector Forum," 26 September 2015, New York, https://www.undp.org/content/undp/en/home/presscenter/speeches/2015/09/26/helen-clark-speech-at-the-un-private-sector-forum.html.
[91] UN Environment Programme Finance Initiative and Freshfields, *A legal framework for the integration of environmental, social and governance issues into institutional investment* (Geneva: UNEP-FI, 2005).
[92] United Nations Conference on Trade and Development, *World Investment Report 2020* (UNCTAD: Geneva, 2020).
[93] "The World in 2021," *The Economist*, 21 November 2020.
[94] Tommy Piermonte, "The importance of considering values in sustainable finance," *Responsible Investor*, 10 January 2020.
[95] "De-risking: Finding the opportunities," *Global Trade Review*, 8 March 2018, https://www.gtreview.com/supplements/gtr-uk-2018/de-risking-finding-opportunities/.
[96] Susan Stames et al., *De-Risking and Other Challenges in the Emerging Market Financial Sector: Findings from IFC's Survey on Correspondent Banking* (Washington DC: World Bank, 2017).
[97] UN Environment Programme, *Global Climate Litigation Report: 2020 Status Review* (Nairobi: UNEP, 2020).
[98] Ibid.
[99] Edward Brans and Mathijs Peters, "Pension fund implements a net-zero carbon footprint target: the emergence of a new financial reality due to climate change litigation?," *Cambridge International Law Journal* (2021), http://cilj.co.uk/2021/02/02/pension-fund-implements-a-net-zero-carbon-footprint-target-the-emergence-of-a-new-financial-reality-due-to-climate-change-litigation/.
[100] UN Environment Programme, *Global Climate Litigation Report: 2020 Status Review* (Nairobi: UNEP, 2020).
[101] Ibid: 15.
[102] Ibid.
[103] Ferry Grijpink et al., "Connected world: An evolution in connectivity beyond the 5G revolution," *McKinsey Global Institute Discussion Paper* (2020).
[104] Douglas Broom, "Coronavirus has exposed the digital divide like never before," *World Economic Forum Agenda*, 22 April 2020, https://www.weforum.org/agenda/2020/04/coronavirus-covid-19-pandemic-digital-divide-internet-data-broadband-mobbile/.
[105] There is a sense of optimism regarding the latent social and economic potential of technology. Exploiting this potential will require investment not only in technology, but also in power. While it may be possible to leverage technology and mobile communication to leapfrog some stages of development, it's not possible to leapfrog physical energy infrastructure. Energy production in LIDCs is not meeting today's demand and will struggle to meet the demand of societies banking on technology to revolutionize their economies. While it is the case that technological advancements, notably mobile technologies have already contributed to the creation of millions of jobs, firms in LIDCs regularly report that the lack of electricity is a major constraint to business activity, along with water and safe, reliable transportation infrastructure. A typical LIDC will direct 19 per cent of total investment in infrastructure to energy. The demographic dividend that Africa is meant to enjoy—economic growth owing to a young working population—will be stymied by the lack of investment in power generation. The demands of a growing workforce, ambitious youth, and a growing technology sector cannot be satisfied by current levels of investment.
[106] International Telecommunication Union/UNESCO, *The State of Broadband: Broadband as a Foundation for Sustainable Development* (Geneva: ITU, 2019).
[107] Norma Möllers, "Making Digital Territory: Cybersecurity, Techno-nationalism, and the Moral Boundaries of the State," *Science, Technology, & Human Values* 46, 1 (2021).

[108] Amy Watson, "Social media as a news source worldwide 2020," Statista, 23 June 2020, https://www.statista.com/statistics/718019/social-media-news-source/.
[109] This can include *malinformation*, the sharing of information meant to be private into the public sphere to cause harm. See, Claire Wardle and Hossein Derakhshan, "Information Disorder: Toward an interdisciplinary framework for research and policy making," *Council of Europe Report DGI* 9 (2017).
[110] Samantha Bradshaw and Philip N. Howard, *The Global Disinformation Order 2019 Global Inventory of Organised Social Media Manipulation* (Oxford: University of Oxford, 2019).
[111] Sean Simpson, "Fake News: A Global Epidemic Vast Majority (86%) of Online Global Citizens Have Been Exposed to it," Ipsos, 11 June 2019, https://www.ipsos.com/en-us/news-polls/cigi-fake-news-global-epidemic.
[112] Ibid.
[113] Samantha Bradshaw and Philip N. Howard, *The Global Disinformation Order 2019 Global Inventory of Organised Social Media Manipulation* (Oxford: University of Oxford, 2019).
[114] Chris Merriman, " Remarks at Ethiopia - Between Hope and Peril - Conflict Management Program Research Trip Report," 19 May 2020, Virtual Event, https://youtu.be/NxA5K6UCN-I.
[115] "2020 Ibrahim Index of African Governance: Key Findings," Mo Ibrahim Foundation, 25 November 2020, https://mo.ibrahim.foundation/news/2020/2020-ibrahim-index-african-governance-key-findings.
[116] Conor Sanchez, "Misinformation is a Threat to Democracy in the Developing World," Council on Foreign Relations, 28 January 2019, https://www.cfr.org/blog/misinformation-threat-democracy-developing-world; Seji Olukotun, "Why is a tiny island nation facing an internet shutdown?," *Access Now*, 14 May 2015, https://www.accessnow.org/why-is-a-tiny-island-nation-facing-an-internet-shutdown/.
[117] Ferry Grijpink et al., "Connected world: An evolution in connectivity beyond the 5G revolution," *McKinsey Discussion Paper* (2020).
[118] Apple earned USD 42 billion in revenue by selling user data to application developers from 2008-2018. Wendy C.Y. Li, "Value of Data: There's No Such Thing as a Free Lunch in the Digital Economy," *Research Institute of Economy, Trade and Industry Discussion Paper* 19022 (2019).
[119] Adam Day and David M. Malone, “The UN at 75: How Today’s Challenges Will Shape the Next 25 Years,” *Global Governance* 26, 2 (2020).
[120] Sebastian von Einsiedel et al., *Civil War Trends and the Changing Nature of Armed Conflict* (Tokyo: United Nations University, 2017).
[121] Ibid.
[122] Julie Jarland et al., "How Should We Understand Patterns of Recurring Conflict?," *PRIO Conflict Trends* 3 (2020).
[123] Scott Gates et al., “Conflict Recurrence,” *Conflict Trends* 2 (Oslo: PRIO, 2016).
[124] Julie Jarland et al., "How Should We Understand Patterns of Recurring Conflict?," *PRIO Conflict Trends* 3 (2020); Sebastian von Einsiedel et al., *Civil War Trends and the Changing Nature of Armed Conflict* (Tokyo: United Nations University, 2017).
[125] Human Security Project, *Human Security Report 2009/2010: The Causes of Peace and the Shrinking Costs of War* (New York: Oxford University Press, 2011).
[126] Andrew Mack, “Even Failed Peace Agreements Save Lives,” Political Violence at a Glance, 10 August 2012.
[127] Jeremy Weinstein, “Autonomous Recovery and International Interventions in Comparative Perspective,” *Working Paper* 57 (Washington DC: Center for Global Development, 2005); see also, Edward Luttwak, “Give War a Chance,” *Foreign Affairs* 78, 4 (1999).
[128] Julie Jarland et al., "How Should We Understand Patterns of Recurring Conflict?," *PRIO Conflict Trends* 3 (2020).
[129] Sebastian von Einsiedel et al., *Civil War Trends and the Changing Nature of Armed* Conflict (Tokyo: United Nations University, 2017).
[130] James Cockayne, “Chasing Shadows: Strategic Responses to Organised Crime in Conflict-Affected Situations,” *RUSI Journal* 158, 2 (2013).
[131] James Fearon, “Why Do Some Civil Wars Last So Much Longer than Others?,” *Journal of Peace Research* 41, 3 (2004): 275-301.
[132] Sebastian von Einsiedel et al., *Civil War Trends and the Changing Nature of Armed Conflict* (Tokyo: United Nations University, 2017); Ruben De Koning, “Conflict Minerals in the Democratic Republic of the Congo: Aligning Trade and Security Interventions,” *SIPRI Policy Paper* 27 (2011); Mark Shaw, “Drug Trafficking and the Development of Organised Crime in Post-Taliban Afghanistan,” *Afghanistan’s Drug Industry* ed. Doris Buddenberh and William Byrd (Washington DC: The World Bank and UN Office on Drugs and Crime, 2006) 189-214.
[133] Timothy Raeymaekers and Ken Menkhaus, “State and Non-State Regulation in African Protracted Crises: Governance Without Government?,” *Afrika Focus* 21 (2008).
[134] Adam Day and Jessica Caus, *Conflict Prevention in the Sahel* (New York: United Nations University, 2020).
[135] See, Ana Arjona, *Rebelocracy* (Cambridge: Cambridge University Press, 2017); Elsa González Aimé, “Fragile states and neoliberalism in Sub-Saharan Africa,” *African Studies Group at the University of Madrid Working Paper* (2008); Ken Menkhaus, “Governance Without Government in Somalia: Spoilers, State Building, and the Politics of Coping,” *International Security* 31, 3 (2006/7): 74-106; Christian Lund and Michael Eilenberg, *Rule and Rupture: State Formation through the Production of Property and Citizenship* (Sussex: Wiley Blackwell, 2017); Vanda Felbab-Brown, “Counterinsurgency, Counternarcotics and Illicit Economies in Afghanistan: Lessons for State Building,” *Convergence: Illicit Networks and National Security in the Age of Globalization* eds. Michael Miklaucic and Jacqueline Brewer (Washington DC: National Defense University Press, 2013);

Christine Cheng, “Private and Public Interests – Informal Actors, Informal Influence, and Economic Order after War,” *The Political Economy of Post-Conflict Statebuilding* ed. Mats Berdal and Dominik Zaum (London: Routledge, 2012).
[136] Chuku Chuku, "Conflict during COVID-19: Averting a legitimacy and debt crisis in Africa?," International Growth Centre, 12 October 2020, https://www.theigc.org/blog/conflict-during-covid-19-averting-a-legitimacy-and-debt-crisis-in-africa/.
[137] Barbara Walter, “New New Wars,” *Annual Review of Political Science* 20, 1 (2017): 469-486.
[138] Seth Jones, *A Persistent Threat: The Evolution of al Qa'ida and Other Salafi Jihadists* (Washington DC: RAND, 2014).
[139] bara Walter, “New New Wars,” *Annual Review of Political Science* 20, 1 (2017): 469-486.
[140] Ibid.
[141] Brian Dodwell et al., *The Caliphate's Global Workforce: An Inside Look at the Islamic State's Foreign Fighter Paper Trail* (West Point, NY: Combating Terrorism Center, 2016).
[142] Sebastian von Einsiedel et al., *Civil War Trends and the Changing Nature of Armed Conflict* (Tokyo: United Nations University, 2017).
[143] Vanda Felbab-Brown, "The Problem with Militias in Somalia: Almost Everyone Wants Them Despite Their Dangers," *Hybrid Conflict, Hybrid Peace: How Militias and Paramilitary Groups Shape Post-conflict Transitions* ed. Adam Day (New York: United Nations University, 2020).
[144] David Cunningham, “Blocking resolution: How external states can prolong civil wars,” *Journal of Peace Research* 47, 2 (2010): 115-127.
[145] "Syria war: US deploys reinforcements to Syria after Russia clashes," *BBC News*, 19 September 2020.
[146] Bruce Riedel, "Yemen's war is escalating again," The Brookings Institution, 26 February 2020, https://www.brookings.edu/blog/order-from-chaos/2020/02/26/yemens-war-is-escalating-again.
[147] For a description of contagion, see, Halvard Buhaug and Kristian Skrede Gleditsch. "Contagion or Confusion? Why Conflicts Cluster in Spac," *International Studies Quarterly* 52, 2 (2008): 215-233; see also, Denis S. Golubev and Irina A. Antonova, "How internal armed conflicts become internationalized: introducing an integrated three-dimensional analytical framework," *Turismo: Estudos & Práticas Notebook* 3 (2020), http://natal.uern.br/periodicos/index.php/RTEP/article/view/2086/1905.
[148] Ashraf Ghani and Clare Lockhardt, *Fixing Failed States* (Oxford: Oxford University Press, 2009).
[149] Ashley Jackson and Florian Weigand, "Rebel rule of law: Taliban courts in the west and north-west of Afghanistan," *ODI Briefing Papers* (2020).
[150] Anthony Morland, “The State of State-building in Somalia,” *IRIN News*, 21 October 2014.
[151] Susan Woodward, *The Ideology of Failed States: Why Intervention Fails* (Cambridge: Cambridge University Press, 2017): 75; Charles T. Call, “The Fallacy of the ‘Failed State,’” *Third World Quarterly* 29, 8 (2008): 1491-1507; Sarah von Billerbeck and Oisín Tansey, “Enabling autocracy? Peacebuilding and post-conflict authoritarianism in the Democratic Republic of Congo,” *European Journal of International Relations* (2019): 1-29; Michael Barnett and Christopher Zürcher, “The Peacebuilder's Contract: How External State-building Reinforces Weak Statehood,” *The Dilemmas of Statebuilding: Confronting the Contradictions of Postwar Peace Operations* eds. Roland Paris and Timothy Sisk (London: Routledge Press, 2009): 23.
[152] Rachel Kleinfeld, *A Savage Order: How the World's Deadliest Countries Can Forge a Path to Security* (New York: Pantheon, 2018).
[153] Alex de Waal, *The Real Politics of the Horn of Africa: Money, War and the Business of Power* (London: Polity Press, 2016).
[154] See, e.g., Thomas Risse, *Governance Without a State: Policies and Politics in Areas of Limited Statehood* (New York: Columbia University Press, 2013); Zachariah Cherian Mampilly, *Rebel Rulers: Insurgent Governance and Civilian Life during War* (Ithaca: Cornell University Press, 2011); James N. Rosenau and Ernst-Otto Czempiel, *Governance without Government: Order and Change in World Politics* (Cambridge: Cambridge University Press, 2010); Paul Jackson, “Warlords as Alternative Forms of Governance,” *Small Wars and Insurgencies* 14 (2003): 131-150; Rodney B. Hall and Thomas J Bierstecker (eds.)., *The Emergence of Private Authority in Global Governance* (Cambridge: Cambridge University Press, 2009); Christine Cheng, *Extralegal Groups in Post-Conflict Liberia: How Trade Makes the State* (Oxford: Oxford University Press, 2018).
[155] Rachel Kleinfeld, *Improving Development Aid Design and Implementation: Plan for Sailboats Not Trains* (Washington DC: Carnegie Endowment for International Peace, 2015).
[156] National Intelligence Council, *Global Trends: Paradox of Progress* (Washington DC: NIC, 2017).
[157] Ibid.
[158] Hannah Ritchie and Max Roser, "Urbanization," Our World in Data, https://ourworldindata.org/urbanization; UN Department of Economic and Social Affairs, "Population Dynamics," last accessed 27 February 2020, https://population.un.org/wup/.
[159] Antonio Ciccone and Robert E. Hall, “Productivity and the density of economic activity,” *National Bureau of Economic Research Working Paper* 4313 (1993); Mark Montgomery et al., *Cities transformed: demographic change and its implications in the developing world* (New York: Routledge: 2013).
[160] Anastasia Moloney and Megan Rowling, "Gangs, crime and slums: growing cities present new challenges for aid agencies," *Reuters*, 17 May 2016.
[161] Ronak B Patel and Frederick M Burkle, "Rapid urbanization and the growing threat of violence and conflict: a 21st century crisis," *Prehosp Disaster Medicine* 27, 2 (2012); Michael Cohen, “Urbanization and Conflict: Trends, Impacts, and Challenges for Development Assistance," *The New School International Affairs Working Paper* (2009).
[162] Hannes Weber, “Age structure and political violence: a reassessment of the ‘youth bulge’ hypothesis,” *International Interactions: Empirical and Theoretical Research in International Relations* 45 (2019); Eric Zuehlke, "Youth Bulges, Urbanization, and Conflict," Population Reference Bureau, 27 August 2009, https://www.prb.org/youthurbanizationconflict/;

[163] Antônio Sampaio, "Rapid Urbanization Is a Risk to Global Security," *Bloomberg City Lab*, 23 July 2018, https://www.bloomberg.com/news/articles/2018-07-23/the-international-security-risks-of-rapid-urbanization.
[164] UN Department of Economic and Social Affairs, "Population Dynamics: Maps," last accessed 27 February 2020, https://population.un.org/wup/. https://population.un.org/wup/Maps/.
[165] International Organization for Migration, *World Migration Report 2020* (Geneva: IOM, 2019), https://www.un.org/sites/un2.un.org/files/wmr_2020.pdf.
[166] Johnny Wood, "This is how many people are forcibly displaced worldwide," *World Economic Forum Agenda*, 18 June 2020, https://www.weforum.org/agenda/2020/06/displacement-numbers-world-refugee-day/#:~:text=Around%20the%20world%2C%202019%20saw,neighbouring%20their%20place%20of%20origin..
[167] United Nations High Commissioner for Refugees, *Global Trends in Forced Displacement in 2019* (Geneva: UNHCR, 2020).
[168] "Rising inequality affecting more than two-thirds of the globe, but it's not inevitable: new UN report," *UN News*, 21 January 202, https://news.un.org/en/story/2020/01/1055681.
[169] UN Department of Economic and Social Affairs, "Executive Summary," *The World Social Report 2020: Inequality in a Rapidly Changing World* (New York: United Nations, 2020), https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report2020-ExecutiveSummary.pdf.
[170] "Rising inequality affecting more than two-thirds of the globe, but it's not inevitable: new UN report," *UN News*, 21 January 202, https://news.un.org/en/story/2020/01/1055681.
[171] United Nations and the World Bank, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict* (Washington DC: World Bank, 2018); Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers* 56, 4 (2004): 563–95; James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97, 1 (2003): 75–90.
[172] United Nations and the World Bank, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict* (Washington DC: World Bank, 2018).
[173] "COVID-19 to Add as Many as 150 Million Extreme Poor by 2021," The World Bank, 7 October 2020, https://www.worldbank.org/en/news/press-release/2020/10/07/covid-19-to-add-as-many-as-150-million-extreme-poor-by-2021.
[174] Marshall Terrill, "AI may present a different kind of revolution," Arizona State University, 28 May 2020, https://asunow.asu.edu/20200528-discoveries-ai-may-present-different-kind-revolution.
[175] Can Kasapoğlu and Barış Kırdemir, *Artificial Intelligence and the Future of Conflict* (Brussels: Carnegie Europe, 2019) https://carnegieeurope.eu/2019/11/28/artificial-intelligence-and-future-of-conflict-pub-80421.
[176] Jayshree Pandya, "The Weaponization Of Artificial Intelligence," *Forbes*, 14 January 2019, https://www.forbes.com/sites/cognitiveworld/2019/01/14/the-weaponization-of-artificial-intelligence/?sh=7b463a813686.
[177] Ashley Roque, "US Army Looking for Ways to Fold AI Research Into Expeditionary Manoeuvre, Air, and Ground Reconnaissance Technologies," *Jane's International Defence Review* (2019); Andrew White, "Ready Player One: The Future of AR and AI," *Jane's Defence Weekly* (2019); Matej Tonin, "Artificial Intelligence: Implications for NATO's Armed Forces," NATO Parliamentary Assembly Science and Technology Committee, 13 October 2019, London, https://www.nato-pa.int/document/2019-stcttc-2019-report-artificial-intelligence-tonin-149-stctts-19-e-rev1-fin.
[178] Paul Maxwell, "Artificial Intelligence is the Future of Warfare (Just Not in the Way That You Think)," Modern War Institute, 20 April 2020, https://mwi.usma.edu/artificial-intelligence-future-warfare-just-not-way-think/.
[179] See, Mark Pomerleau, "Pentagon's AI center to field new psychological operations tool," *C4ISRNet*, 11 September 2020, https://www.c4isrnet.com/artificial-intelligence/2020/09/11/pentagons-ai-center-to-field-new-psychological-operations-tool.
[180] Paul Triolo and Graham Webster, "China's Efforts to Build the Semiconductors at AI's Core," New America, 7 December 2018, https://www.newamerica.org/cybersecurity-initiative/digichina/blog/chinas-efforts-to-build-the-semiconductors-at-ais-core/.
[181] Can Kasapoğlu and Barış Kırdemir, *Artificial Intelligence and the Future of Conflict* (Brussels: Carnegie Europe, 2019) https://carnegieeurope.eu/2019/11/28/artificial-intelligence-and-future-of-conflict-pub-80421.
[182] David Vergun, "Experts Predict Artificial Intelligence Will Transform Warfare," US Department of Defense, 5 June 2020, https://www.defense.gov/Explore/News/Article/Article/2209480/experts-predict-artificial-intelligence-will-transform-warfare.
[183] This concept from Peter W. Singer. See, Sean Illing, "The rise of AI is sparking an international arms race," *Vox*, 13 September 2017, https://www.vox.com/world/2017/9/13/16287892/elon-musk-putin-artificial-intelligence-war.
[184] Eleonore Pauwels, *The New Geopolitics of Converging Risks: The UN and Prevention in an Era of AI* (New York: United Nations University, 2019).
[185] Ibid.
[186] Renée DiResta, "The Supply of Disinformation Will Soon Be Infinite," *The Atlantic*, 20 September 2020, https://www.theatlantic.com/ideas/archive/2020/09/future-propaganda-will-be-computer-generated/616400/.
[187] Cristian Vaccari and Andrew Chadwick, "Deepfakes and Disinformation: Exploring the Impact of Synthetic Political Video on Deception, Uncertainty, and Trust in News," *Social Media + Society* (2020), https://journals.sagepub.com/doi/full/10.1177/2056305120903408.
[188] A 2014 Pew Study in the US found that the highest per centage of trust in a single news agency was only 54 per cent, while far more gravitated towards social media has their main source of news. Monica Anderson and Andrea Caumont, "How social media is reshaping news," Pew Research Center, 24 September 2014.
[189] National Intelligence Council, *Global Trends: Paradox of Progress* (Washington DC: NIC, 2017).

[190] Johan Schaar, "The relationship between climate change and violent conflict," *SIDA Green Tool Box / Peace Security Tool Box Working Paper* (2018), https://www.sida.se/contentassets/c571800e01e448ac9dce2d097ba125a1/working-paper---climate-change-and-conflict.pdf; Malin Mobjörk et al., *Climate-related Security Risks: Towards an Integrated Approach* (Solna, Sweden: SIPRI, 2016); Caitlin E. Werrell and Francesco Femia (eds.), *The Arab Spring and Climate Change: A Climate and Security Correlations Series* (Washington DC: Center for American Progress, Stimson and The Center for Climate and Security, 2013).
[191] W. Neil Adger, "Human security," *Climate Change 2014: Impacts, Adaptation and Vulnerability* eds. Christopher B. Field et al. (Cambridge University Press: Cambridge, 2014): 775–91.
[192] Gwynne Dyer, *Climate Wars: The fight for survival as the world overheats* (London: One World Publications, 2010).
[193] Paolo Vineis, Queenie Chan, and Aneire Khan, "Climate change impacts on water salinity and health," *Journal of Epidemiology and Global Health* (2011): 1-10.
[194] Vincent Roth et al., "Effects of climate change on water resources in the upper Blue Nile Basin of Ethiopia," *Heliyon* 4, 9 (2018); José A. Marengo et al., "Climate Change and Water Resources," *Waters of Brazil* eds. *Carlos Eduardo de Mattos Bicudo et al.* (New York: Springer International Publishing, 2017): 171-186.
[195] Alex Evans, "Resource Scarcity, Climate Change, and Violent Conflict," W*orld Development Report Background Paper* (2010).
[196] Rupert Seidl et al., "Forest disturbances under climate change," *Nature Climate Change* 7 (2017): 395–402.
[197] Christopher K. Butler and Scott Gates, "African range wars: Climate, conflict, and property rights," *Journal of Peace Research* 49, 1 (2012): 23-34.
[198] Katharine J. Mach et al., "Climate as a risk factor for armed conflict," *Nature* 571 (2019), 195.
[199] Halvard Buhaug et al., "Climate variability, food production shocks, and violent conflict in Sub-Saharan Africa," *Environmental Research Letters* 10 (2015); Goytom Abraha Kahsay and Lars Gårn Hansen, "The Effect of Climate Change and Adaptation Policy on Agricultural Production in Eastern Africa," *IFRO Working Paper* 8 (2014).
[200] Cullen Hendrix and Sarah M. Glaser, "Trends and Triggers: Climate, climate change and civil conflict in Sub-Saharan Africa," *Political Geography* 26(6) (2007): 695-715.
[201] Nina von Uexküll, "Sustained drought, vulnerability and civil conflict in Sub-Saharan Africa," *Political Geography* 43 (2014): 16–26; see also, Sarah Johnstone and Jeffrey Mazo, "Global warming and the Arab Spring," *Survival* 53, 2 (2011): 11-17.
[202] For this critique, see Nils Petter Gleditsch and Henrik Urdal, "Ecoviolence? Links Between Population Growth, Environmental Scarcity and Violent Conflict in Thomas Homer-Dixon's Work," *Journal of International Affairs* (2002): 283-302.
[203] Jean-François Maystadt, Margherita Calderone and Liangzhi You, "Local warming and violent conflict in North and South Sudan," *Journal of Economic Geography* 15, 3 (2015): 649–671.
[204] Patrick Meier, Doug Bond and Joe Bond, "Environmental Influences on Pastoral Conflict in the Horn of Africa," *Political Geography* 26, 6 (2007): 716-735; Sebastian van Baalen and Malin Mobjörk, *A coming anarchy? Pathways from climate change to violent conflict in East Africa* (Stockholm: Stockholm University, 2016); Janpeter Schilling et al., "On raids and relations: Climate change and pastoral conflict in Northern Kenya," *Climate Change and Conflict: Where to for Conflict Sensitive Climate Adaptation in Africa?* eds. Salome Bronkhorst and Bob Urmila (Berlin: Berliner Wissenschaftsverlag, 2014), 241-268.
[205] See, Janpeter Schilling, Jürgen Scheffran and Michael P. Link, "Climate Change and Land Use Conflicts in Northern Africa," *Nova Acta Leopoldina* 112, 384 (2010): 173-18; Anthony Nyong, "Climate-related conflicts in West Africa," *Environmental Change and Security Program Report* 12 (2007): 36-43.
[206] Betsy Hartmann, "Rethinking climate refugees and climate conflict: Rhetoric, reality and the politics of policy discourse," *Journal of International Development* 22, 2 (2010); Giovanni Bettini, "Climate Barbarians at the Gate? A Critique of Apocalyptic Narratives on 'Climate Refugees,'" *Geoforum* 45 (2013): 63-72.
[207] Halvard Buhaug, "Climate-conflict research: some reflections on the way forward," *WIREs Climate Change* 6 (2015): 269-275.
[208] Lukas Rüttinger, *Climate and Fragility Risks: The Global Perspective* (Milan: Adelphi Publication, 2017; Halvard Buhaug, "Climate Change and Conflict: Taking Stock," *Peace Economics, Peace Science and Public Policy* 22, 4 (2016).
[209] Katharine J. Mach et al., "Climate as a risk factor for armed conflict," *Nature* 571 (2019): 195.
[210] Frank DW Witmer et al., "Subnational Violent Conflict Forecasts for Sub-Saharan Africa, 2015–65, Using Climate-Sensitive Models." *Journal of Peace Research* 54, 2 (2017): 175–92.
[211] Richard Haas, *A World in Disarray: American Foreign Policy and the Crisis of the Old Order* (New York: Penguin, 2018).
[212] Leah Zamore and T. Alexander Aleinikoff, *The Arc of Protection: Reforming the International Refugee Regime* (Palo Alto: Stanford University Press, 2019).
[213] António Guterres, "Remarks at the General Assembly's Seventy-Fifth Anniversary Meeting: Inclusive, Networked Multilateralism Vital for Better World Governance," 21 September 2020, New York, https://www.un.org/press/en/2020/sgsm20264.doc.htm.



767 Third Avenue, 35th Floor
New York, New York
10017

cpr.unu.edu

UNITED NATIONS
UNIVERSITY
Centre for Policy Research