



A PUBLICATION
OF THE NATIONAL
INTELLIGENCE COUNCIL

MARCH 2021

GLOBAL TRENDS 2040

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A MORE CONTESTED WORLD



GLOBAL TRENDS

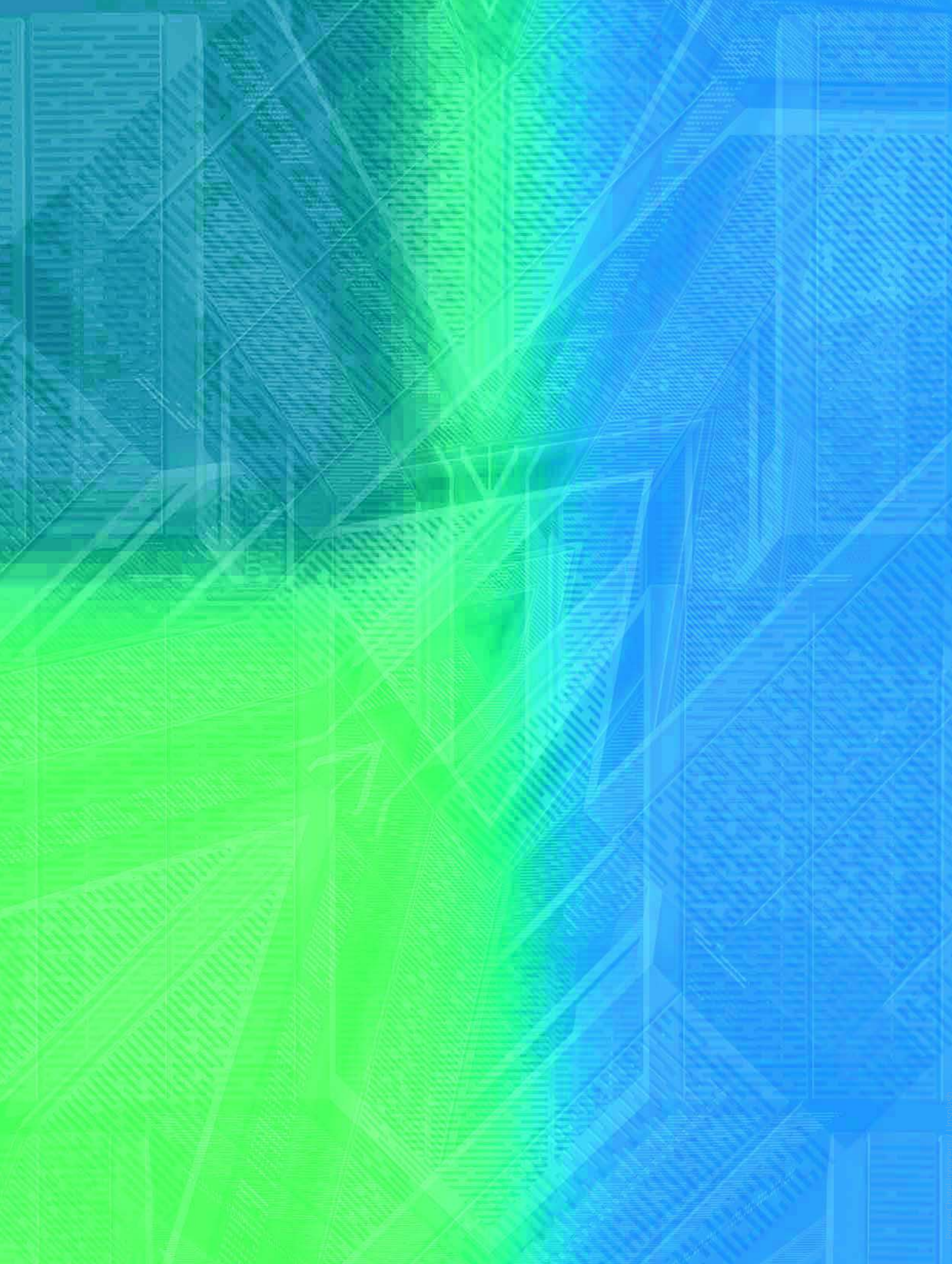


“Intelligence does not claim infallibility for its prophecies. Intelligence merely holds that the answer which it gives is the most deeply and objectively based and carefully considered estimate.”

Sherman Kent

Founder of the Office of National Estimates





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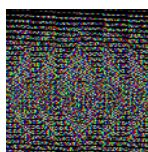
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FOREWORD

Welcome to the 7th edition of the National Intelligence Council's Global Trends report. Published every four years since 1997, Global Trends assesses the key trends and uncertainties that will shape the strategic environment for the United States during the next two decades.

Global Trends is designed to provide an analytic framework for policymakers early in each administration as they craft national security strategy and navigate an uncertain future. The goal is not to offer a specific prediction of the world in 2040; instead, our intent is to help policymakers and citizens see what may lie beyond the horizon and prepare for an array of possible futures.

Each edition of Global Trends is a unique undertaking, as its authors on the National Intelligence Council develop a methodology and formulate the analysis. This process involved numerous steps: examining and evaluating previous editions of Global Trends for lessons learned; research and discovery involving widespread consultations, data collection, and commissioned research; synthesizing, outlining, and drafting; and soliciting internal and external feedback to revise and sharpen the analysis.

A central component of the project has been our conversations with the world outside our security gates. We benefited greatly from ongoing conversations with esteemed academics and researchers across a range of disciplines, anchoring our study in the latest theories and data. We also broadened our contacts to hear diverse perspectives, ranging from high school students in Washington DC, to civil society organizations in Africa, to business leaders in Asia, to foresight practitioners in Europe and Asia, to environmental groups in South America. These discussions offered us new ideas and expertise, challenged our assumptions, and helped us to identify and understand our biases and blind spots.

One of the key challenges with a project of this breadth and magnitude is how to organize all the analysis into a story that is coherent, integrated, and forward looking. We constructed this report around two central organizing principles: identifying and assessing broad forces that are shaping the future strategic environment, and then exploring how populations and leaders will act on and respond to the forces.

Based on those organizing principles, we built the analysis in three general sections. First, we explore **structural forces** in four core areas: demographics, environment, economics, and technology. We selected these areas because they are foundational in shaping future

dynamics and relatively universal in scope, and because we can offer projections with a reasonable degree of confidence based on available data and evidence. The second section examines how these structural forces interact and intersect with other factors to affect **emerging dynamics** at three levels of analysis: individuals and society, states, and the international system. The analysis in this section involves a higher degree of uncertainty because of the variability of human choices that will be made in the future. We focus on identifying and describing the key emerging dynamics at each level, including what is driving them and how they might evolve over time. Finally, the third section identifies several key uncertainties and uses these to create five **future scenarios** for the world in 2040. These scenarios are not intended to be predictions but to widen the aperture as to the possibilities, exploring various combinations of how the structural forces, emerging dynamics, and key uncertainties could play out.

When exploring the long-term future, another challenge is choosing which issues to cover and emphasize, and which ones to leave out. We focused on global, long-term trends and dynamics that are likely to shape communities, states, and the international system for decades and to present them in a broader context. Accordingly, there is less on other near-term issues and crises.

We offer this analysis with humility, knowing that invariably the future will unfold in ways that we have not foreseen. Although *Global Trends* is necessarily more speculative than most intelligence assessments, we rely on the fundamentals of our analytic tradecraft: we construct arguments that are grounded in data and appropriately caveated; we show our work and explain what we know and do not know; we consider alternative hypotheses and how we could be wrong; and we do not advocate policy positions or preferences. *Global Trends* reflects the National Intelligence Council's perspective on these future trends; it does not represent the official, coordinated view of the US Intelligence Community nor US policy.

We are proud to publish this report publicly for audiences around the world to read and consider. We hope that it serves as a useful resource and provokes a conversation about our collective future.

Finally, a note of gratitude to colleagues on the National Intelligence Council and the wider Intelligence Community who joined in this journey to understand our world, explore the future, and draft this report.

*The Strategic Futures Group
National Intelligence Council
March 2021*



INTRODUCTION

Key Themes

DURING THE PAST YEAR, THE COVID-19 PANDEMIC HAS REMINDED THE WORLD OF ITS FRAGILITY AND DEMONSTRATED THE INHERENT RISKS OF HIGH LEVELS OF INTERDEPENDENCE. IN COMING YEARS AND DECADES, THE WORLD WILL FACE MORE INTENSE AND CASCADING GLOBAL CHALLENGES RANGING FROM DISEASE TO CLIMATE CHANGE TO THE DISRUPTIONS FROM NEW TECHNOLOGIES AND FINANCIAL CRISES.

These challenges will repeatedly test the resilience and adaptability of communities, states, and the international system, often exceeding the capacity of existing systems and models. This looming disequilibrium between existing and future challenges and the ability of institutions and systems to respond is likely to grow and produce greater contestation at every level.

In this more contested world, communities are increasingly fractured as people seek security with like-minded groups based on established and newly prominent identities; states of all types and in all regions are struggling to meet the needs and expectations of more connected, more urban, and more empowered populations; and the international system is more competitive—shaped in part by challenges from a rising China—and at greater risk of conflict as states and nonstate actors exploit new sources of power and erode longstanding norms and institutions that have provided some stability in past decades. These dynamics are not fixed in perpetuity, however, and we envision a variety of plausible scenarios for the world of 2040—from a democratic renaissance to a transformation in global cooperation spurred by shared tragedy—depending on how these dynamics interact and human choices along the way.

**FIVE THEMES APPEAR THROUGHOUT
THIS REPORT AND UNDERPIN THIS
OVERALL THESIS.**



GLOBAL CHALLENGES

First, shared **global challenges**—including climate change, disease, financial crises, and technology disruptions—are likely to manifest more frequently and intensely in almost every region and country. These challenges—which often lack a direct human agent or perpetrator—will produce widespread strains on states and societies as well as shocks that could be catastrophic. The ongoing COVID-19 pandemic marks the most significant, singular global disruption since World War II, with health, economic, political, and security implications that will ripple for years to come. The effects of climate change and environmental degradation are likely to exacerbate food and water insecurity for poor countries, increase migration, precipitate new health challenges, and contribute to biodiversity losses. Novel technologies will appear and diffuse faster and faster, disrupting jobs, industries, communities, the nature of power, and what it means to be human. Continued pressure for global migration—as of 2020 more than 270 million persons were living in a country to which they have migrated, 100 million more than in 2000—will strain both origin and destination countries to manage the flow and effects. These challenges will intersect and cascade, including in ways that are difficult to anticipate. National security will require not only defending against armies and arsenals but also withstanding and adapting to these shared global challenges.



FRAGMENTATION

Second, the difficulty of addressing these transnational challenges is compounded in part by increasing **fragmentation** within communities, states, and the international

system. Paradoxically, as the world has grown more connected through communications technology, trade, and the movement of people, that very connectivity has divided and fragmented people and countries. The hyper-connected information environment, greater urbanization, and interdependent economies mean that most aspects of daily life, including finances, health, and housing, will be more connected all the time. The Internet of Things encompassed 10 billion devices in 2018 and is projected to reach 64 billion by 2025 and possibly many trillions by 2040, all monitored in real time. In turn, this connectivity will help produce new efficiencies, conveniences, and advances in living standards. However, it will also create and exacerbate tensions at all levels, from societies divided over core values and goals to regimes that employ digital repression to control populations. As these connections deepen and spread, they are likely to grow increasingly fragmented along national, cultural, or political preferences. In addition, people are likely to gravitate to information silos of people who share similar views, reinforcing beliefs and understanding of the truth. Meanwhile, globalization is likely to endure but transform as economic and production networks shift and diversify. All together, these forces portend a world that is both inextricably bound by connectivity and fragmenting in different directions.



DISEQUILIBRIUM

The scale of transnational challenges, and the emerging implications of fragmentation, are exceeding the capacity of existing systems and structures, highlighting the third theme: **disequilibrium**. There is an increasing mismatch at all levels between challenges and needs with the systems and organizations to deal with them. The international system—including the organizations, alliances, rules, and norms—is poorly set up to address the compounding global challenges facing populations.

The COVID-19 pandemic has provided a stark example of the weaknesses in international coordination on health crises and the mismatch between existing institutions, funding levels, and future health challenges. Within states and societies, there is likely to be a persistent and growing gap between what people demand and what governments and corporations can deliver. From Beirut to Bogota to Brussels, people are increasingly taking to the streets to express their dissatisfaction with governments' ability to meet a wide range of needs, agendas, and expectations. As a result of these disequilibriums, old orders—from institutions to norms to types of governance—are strained and in some cases, eroding. And actors at every level are struggling to agree on new models for how to structure civilization.



CONTESTATION

A key consequence of greater imbalance is greater **contestation** within communities, states, and the international community. This encompasses rising tensions, division, and competition in societies, states, and at the international level. Many societies are increasingly divided among identity affiliations and at risk of greater fracturing. Relationships between societies and governments will be under persistent strain as states struggle to meet rising demands from populations. As a result, politics within states are likely to grow more volatile and contentious, and no region, ideology, or governance system seems immune or to have the answers. At the international level, the geopolitical environment will be more competitive—shaped by China's challenge to the United States and Western-led international system. Major powers are jockeying to establish and exploit new rules of the road.

This contestation is playing out across domains from information and the media to trade and technological innovations.



ADAPTATION

Finally, **adaptation** will be both an imperative and a key source of advantage for all actors in this world. Climate change, for example, will force almost all states and societies to adapt to a warmer planet. Some measures are as inexpensive and simple as restoring mangrove forests or increasing rainwater storage; others are as complex as building massive sea walls and planning for the relocation of large populations. Demographic shifts will also require widespread adaptation. Countries with highly aged populations like China, Japan, and South Korea, as well as Europe, will face constraints on economic growth in the absence of adaptive strategies, such as automation and increased immigration. Technology will be a key avenue for gaining advantages through adaptation. For example, countries that are able to harness productivity boosts from artificial intelligence (AI) will have expanded economic opportunities that could allow governments to deliver more services, reduce national debt, finance some of the costs of an aging population, and help some emerging countries avoid the middle-income trap. The benefits from technology like AI will be unevenly distributed within and between states, and more broadly, adaptation is likely to reveal and exacerbate inequalities. The most effective states are likely to be those that can build societal consensus and trust toward collective action on adaptation and harness the relative expertise, capabilities, and relationships of nonstate actors to complement state capacity.

This edition of Global Trends constructs its analysis of the future in several stages.

First, we examine structural forces in demographics, environment, economics, and technology that shape the contours of our future world.

Second, we analyze how these structural forces and other factors—combined with human responses—affect emerging dynamics in societies, states, and the international system.

Third, we envision five plausible scenarios for the distant future in 2040.

The key themes discussed previously appear across these sections.

STRUCTURAL FORCES

DEMOGRAPHICS AND HUMAN DEVELOPMENT

Slowing global population growth and a rising median age will help some developing economies, but rapidly aging and contracting populations will weigh on many developed economies. Decades of progress in education, health, and poverty reduction will be difficult to build on or even sustain. Pressure for migration is likely to increase.

EMERGING DYNAMICS

SOCIETAL

Many populations are increasingly pessimistic and distrustful as they struggle to deal with disruptive economic, technological, and demographic trends. Newly prominent identities, resurgent established allegiances, and a siloed information environment are exposing fault lines within communities and states, undermining civic nationalism, and increasing volatility. Populations are more informed and have greater ability to express their demands.

SCENARIOS FOR 2040

RENAISSANCE OF DEMOCRACIES

The world is in the midst of a resurgence of open democracies led by the United States and its allies. Rapid technological advancements fostered by public-private partnerships in the United States and other democratic societies are transforming the global economy, raising incomes, and improving the quality of life for millions around the globe. In contrast, years of increasing societal controls and monitoring in China and Russia have stifled innovation.

ENVIRONMENT

Climate change will increasingly exacerbate risks to human and national security and force states to make hard choices and tradeoffs. The burdens will be unevenly distributed, heightening competition, contributing to instability, straining military readiness, and encouraging political movements.

ECONOMICS

Several global economic trends, including rising national debt, a more complex and fragmented trading environment, the global spread of trade in services, new employment disruptions, and the continued rise of powerful firms, are shaping conditions within and between states. Calls for more planning and regulation will intensify, particularly of large platform, e-commerce corporations.

TECHNOLOGY

The pace and reach of technological developments will increase, transforming human experiences and capabilities while creating new tensions and disruptions for all actors. Global competition for the core elements of technology supremacy will increase. Spin off technologies and applications will enable rapid adoption.

STATE

Governments will face mounting pressures from the combination of economic constraints; demographic, environmental, and other challenges; and more empowered populations. A growing gap between public demands and what governments can deliver will raise tensions, increase political volatility, and threaten democracy. The mismatch may also spur new or shifting sources and models of governance.

INTERNATIONAL

Power in the international system will evolve to include a broader set of sources, but no single state is likely to be positioned to dominate across all regions or domains. The United States and China will have the greatest influence on global dynamics, forcing starker choices on other actors, increasing jockeying over global norms, rules, and institutions, and heightening the risk of interstate conflict.

A WORLD ADRIFT

The international system is directionless, chaotic, and volatile as international rules and institutions are largely ignored. OECD countries are plagued by slower economic growth, widening societal divisions, and political paralysis. China is taking advantage of the West's troubles to expand its international influence. Many global challenges are unaddressed.

COMPETITIVE COEXISTENCE

The United States and China have prioritized economic growth and restored a robust trading relationship, but this economic interdependence exists alongside competition over political influence, governance models, technological dominance, and strategic advantage. The risk of major war is low, and international cooperation and technological innovation make global problems manageable.

SEPARATE SILOS

The world is fragmented into several economic and security blocs of varying size and strength, centered on the United States, China, the EU, Russia, and a few regional powers, and focused on self-sufficiency, resiliency, and defense. Information flows within separate cyber-sovereign enclaves, supply chains are reoriented, and international trade is disrupted. Vulnerable developing countries are caught in the middle.

TRAGEDY AND MOBILIZATION

A global coalition, led by the EU and China working with NGOs and revitalized multilateral institutions, is implementing far-reaching changes designed to address climate change, resource depletion, and poverty following a global food catastrophe caused by climate events and environmental degradation. Richer countries shift to help poorer ones manage the crisis and then transition to low carbon economies through broad aid programs and transfers of advanced energy technologies.

INTRODUCTION

Executive Summary

STRUCTURAL FORCES SETTING THE PARAMETERS

Trends in demographics and human development, environment, economics, and technology are laying the foundation and constructing the bounds of our future world. In some areas, these trends are becoming more intense, such as changes in our climate, the concentration of people in urban areas, and the emergence of new technologies. Trends in other areas are more uncertain—gains in human development and economic growth are likely to slow and may even reverse in some areas, although a mix of factors could change this trajectory. The convergence of these trends will offer opportunities for innovation but also will leave some communities and states struggling to cope and adapt. Even apparent progress, such as new and advanced technologies, will be disruptive to many people's lives and livelihoods, leaving them feeling insecure and forcing adaptation.

The most certain trends during the next 20 years will be major **demographic** shifts as global population growth slows and the world rapidly ages. Some developed and emerging economies, including in Europe and East Asia, will grow older faster and face contracting populations, weighing on economic growth. In contrast, some developing countries in Latin

America, South Asia, and the Middle East and North Africa benefit from larger working-age populations, offering opportunities for a demographic dividend if coupled with improvements in infrastructure and skills. **Human development**, including health, education, and household prosperity, has made historic improvements in every region during the past few decades. Many countries will struggle to build on and even sustain these successes. Past improvements focused on the basics of health, education, and poverty reduction, but the next levels of development are more difficult and face headwinds from the COVID-19 pandemic, potentially slower global economic growth, aging populations, and the effects of conflict and climate. These factors will challenge governments seeking to provide the education and infrastructure needed to improve the productivity of their growing urban middle classes in a 21st century economy. As some countries rise to these challenges and others fall short, shifting global demographic trends almost certainly will aggravate disparities in economic opportunity within and between countries during the next two decades as well as create more pressure for and disputes over migration.

In the **environment**, the physical effects of climate change are likely to intensify during the next two decades, especially in the 2030s. More

extreme storms, droughts, and floods; melting glaciers and ice caps; and rising sea levels will accompany rising temperatures. The impact will disproportionately fall on the developing world and poorer regions and intersect with environmental degradation to create new vulnerabilities and exacerbate existing risks to economic prosperity, food, water, health, and energy security. Governments, societies, and the private sector are likely to expand adaptation and resilience measures to manage existing threats, but these measures are unlikely to be evenly distributed, leaving some populations behind. Debates will grow over how and how quickly to reach net zero greenhouse gas emissions.

During the next two decades, several global **economic trends**, including rising national debt, a more complex and fragmented trading environment, a shift in trade, and new employment disruptions are likely to shape conditions within and between states. Many governments may find they have reduced flexibility as they navigate greater debt burdens, diverse trading rules, and a broader array of powerful state and corporate actors exerting influence. Large platform corporations—which provide online markets for large numbers of buyers and seller—could drive continued trade globalization and help smaller firms grow and gain access to international markets. These powerful firms are likely to try to exert influence in political and social arenas, efforts that may lead governments to impose new restrictions. Asian economies appear poised to continue decades of growth through at least 2030, although potentially slower. They are unlikely to reach the per capita gross domestic product (GDP) or economic influence of existing advanced economies, including the United States and Europe. Productivity growth remains a key variable; an increase in the rate of growth could alleviate

many economic, human development, and other challenges.

Technology will offer the potential to mitigate problems, such as climate change and disease, and to create new challenges, such as job displacement. Technologies are being invented, used, spread, and then discarded at ever increasing speeds around the world, and new centers of innovation are emerging. During the next two decades, the pace and reach of technological developments are likely to increase ever faster, transforming a range of human experiences and capabilities while also creating new tensions and disruptions within and between societies, industries, and states. State and nonstate rivals will vie for leadership and dominance in science and technology with potentially cascading risks and implications for economic, military, and societal security.

EMERGING DYNAMICS

These structural forces, along with other factors, will intersect and interact at the levels of societies, states, and the international system, creating opportunities as well as challenges for communities, institutions, corporations, and governments. These interactions are also likely to produce greater contestation at all levels than has been seen since the end of the Cold War, reflecting differing ideologies as well as contrasting views on the most effective way to organize society and tackle emerging challenges.

Within **societies**, there is increasing fragmentation and contestation over economic, cultural, and political issues. Decades of steady gains in prosperity and other aspects of human development have improved lives in every region and raised peoples' expectations for a better future. As these trends plateau and combine with rapid social and technological changes,

large segments of the global population are becoming wary of institutions and governments that they see as unwilling or unable to address their needs. People are gravitating to familiar and like-minded groups for community and security, including ethnic, religious, and cultural identities as well as groupings around interests and causes, such as environmentalism. The combination of newly prominent and diverse identity allegiances and a more siloed information environment is exposing and aggravating fault lines within states, undermining civic nationalism, and increasing volatility.

At the **state level**, the relationships between societies and their governments in every region are likely to face persistent strains and tensions because of a growing mismatch between what publics need and expect and what governments can and will deliver. Populations in every region are increasingly equipped with the tools, capacity, and incentive to agitate for their preferred social and political goals and to place more demands on their governments to find solutions. At the same time that populations are increasingly empowered and demanding more, governments are coming under greater pressure from new challenges and more limited resources. This widening gap portends more political volatility, erosion of democracy, and expanding roles for alternative providers of governance. Over time, these dynamics might open the door to more significant shifts in how people govern.

In the **international system**, no single state is likely to be positioned to dominate across all regions or domains, and a broader range of actors will compete to shape the international system and achieve narrower goals. Accelerating shifts in military power, demographics,

economic growth, environmental conditions, and technology, as well as hardening divisions over governance models, are likely to further ratchet up competition between China and a Western coalition led by the United States. Rival powers will jockey to shape global norms, rules, and institutions, while regional powers and nonstate actors may exert more influence and lead on issues left unattended by the major powers. These highly varied interactions are likely to produce a more conflict-prone and volatile geopolitical environment, undermine global multilateralism, and broaden the mismatch between transnational challenges and institutional arrangements to tackle them.

ALTERNATIVE SCENARIOS FOR 2040

Human responses to these core drivers and emerging dynamics will determine how the world evolves during the next two decades. Of the many uncertainties about the future, we explored three key questions around conditions within specific regions and countries and the policy choices of populations and leaders that will shape the global environment. From these questions, we constructed five scenarios for alternative worlds in the year 2040.

- How severe are the looming global challenges?
- How do states and nonstate actors engage in the world, including focus and type of engagement?
- Finally, what do states prioritize for the future?

In **Renaissance of Democracies**, the world is in the midst of a resurgence of open democracies led by the United States and its allies. Rapid technological advancements fostered



by public-private partnerships in the United States and other democratic societies are transforming the global economy, raising incomes, and improving the quality of life for millions around the globe. The rising tide of economic growth and technological achievement enables responses to global challenges, eases societal divisions, and renews public trust in democratic institutions. In contrast, years of increasing societal controls and monitoring in China and Russia have stifled innovation as leading scientists and entrepreneurs have sought asylum in the United States and Europe.

In **A World Adrift**, the international system is directionless, chaotic, and volatile as international rules and institutions are largely ignored by major powers like China, regional players, and nonstate actors. Organization for Economic Cooperation and Development (OECD) countries are plagued by slower economic growth, widening societal divisions, and political paralysis. China is taking advantage of the West's troubles to expand its international influence, especially in Asia, but Beijing lacks the will and military might to take on global leadership, leaving many global challenges, such as climate change and instability in developing countries, largely unaddressed.

In **Competitive Coexistence**, the United States and China have prioritized economic growth and restored a robust trading relationship, but this economic interdependence exists alongside competition over political influence, governance models, technological dominance, and strategic advantage. The risk of major war is low, and international coopera-

tion and technological innovation make global problems manageable over the near term for advanced economies, but longer term climate challenges remain.

In **Separate Silos**, the world is fragmented into several economic and security blocs of varying size and strength, centered on the United States, China, the European Union (EU), Russia, and a couple of regional powers; these blocs are focused on self-sufficiency, resiliency, and defense. Information flows within separate cyber-sovereign enclaves, supply chains are reoriented, and international trade is disrupted. Vulnerable developing countries are caught in the middle with some on the verge of becoming failed states. Global problems, notably climate change, are spottily addressed, if at all.

In **Tragedy and Mobilization**, a global coalition, led by the EU and China working with nongovernmental organizations and revitalized multilateral institutions, is implementing far-reaching changes designed to address climate change, resource depletion, and poverty following a global food catastrophe caused by climate events and environmental degradation. Richer countries shift to help poorer ones manage the crisis and then transition to low carbon economies through broad aid programs and transfers of advanced energy technologies, recognizing how rapidly these global challenges spread across borders.

