



# GLOBAL TRENDS PARADOX OF PROGRESS

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# THE MAP OF THE FUTURE



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Vietnamese children walking home from school.

## THE MAP OF THE FUTURE

Our story of the future begins and ends with a paradox: The same global trends suggesting a dark and difficult near future, despite the progress of recent decades, also bear within them opportunities for choices that yield more hopeful, secure futures. In the pages to come, we use multiple time horizons to help explore the future from different perspectives, to illustrate the risks for sudden discontinuities and deep, slow-moving shifts, and to flag decision points.

We start with an exploration of “Key Trends” that are changing the global landscape and illuminate today’s paradox. We discuss as well how these trends are “Changing the Nature of Power, Governance, and Cooperation” as a way to diagnose why and how global dynamics have become more challenging in recent years.

Absent very different personal, political, and business choices, the current trajectory of trends and power dynamics will play out in a “Near-Future of Rising Tensions.”

Shifting gears, we explore trajectories for how the trends could unfold over a 20-year horizon through “Three Scenarios for the Distant Future: Islands, Orbits, and Communities.” Each scenario identifies decision points that might lead to brighter or darker futures, and develops implications for foreign policy planning assumptions.

Finally, we discuss the lessons these scenarios provide regarding potential opportunities and tradeoffs in creating the future, rather than just responding to it.

Throughout the document, we have placed imagined headlines from the future to highlight the types of discontinuities that could emerge at any point from the convergence of key trends.



# TRENDS TRANSFORMING THE GLOBAL LANDSCAPE



## Global Trends and Key Implications Through 2035

**The rich are aging, the poor are not.** Working-age populations are shrinking in wealthy countries, China, and Russia but growing in developing, poorer countries, particularly in Africa and South Asia, increasing economic, employment, urbanization, and welfare pressures and spurring migration. Training and continuing education will be crucial in developed and developing countries alike.

**The global economy is shifting.** Weak economic growth will persist in the near term. Major economies will confront shrinking workforces and diminishing productivity gains while recovering from the 2008-09 financial crisis with high debt, weak demand, and doubts about globalization. China will attempt to shift to a consumer-driven economy from its longstanding export and investment focus. Lower growth will threaten poverty reduction in developing countries.

**Technology is accelerating progress but causing discontinuities.** Rapid technological advancements will increase the pace of change and create new opportunities but will aggravate divisions between winners and losers. Automation and artificial intelligence threaten to change industries faster than economies can adjust, potentially displacing workers and limiting the usual route for poor countries to develop. Biotechnologies such as genome editing will revolutionize medicine and other fields, while sharpening moral differences.

**Ideas and Identities are driving a wave of exclusion.** Growing global connectivity amid weak growth will increase tensions within and between societies. Populism will increase on the right and the left, threatening liberalism. Some leaders will use nationalism to shore up control. Religious influence will be increasingly consequential and more authoritative than many governments. Nearly all countries will see economic forces boost women's status and leadership roles, but backlash also will occur.

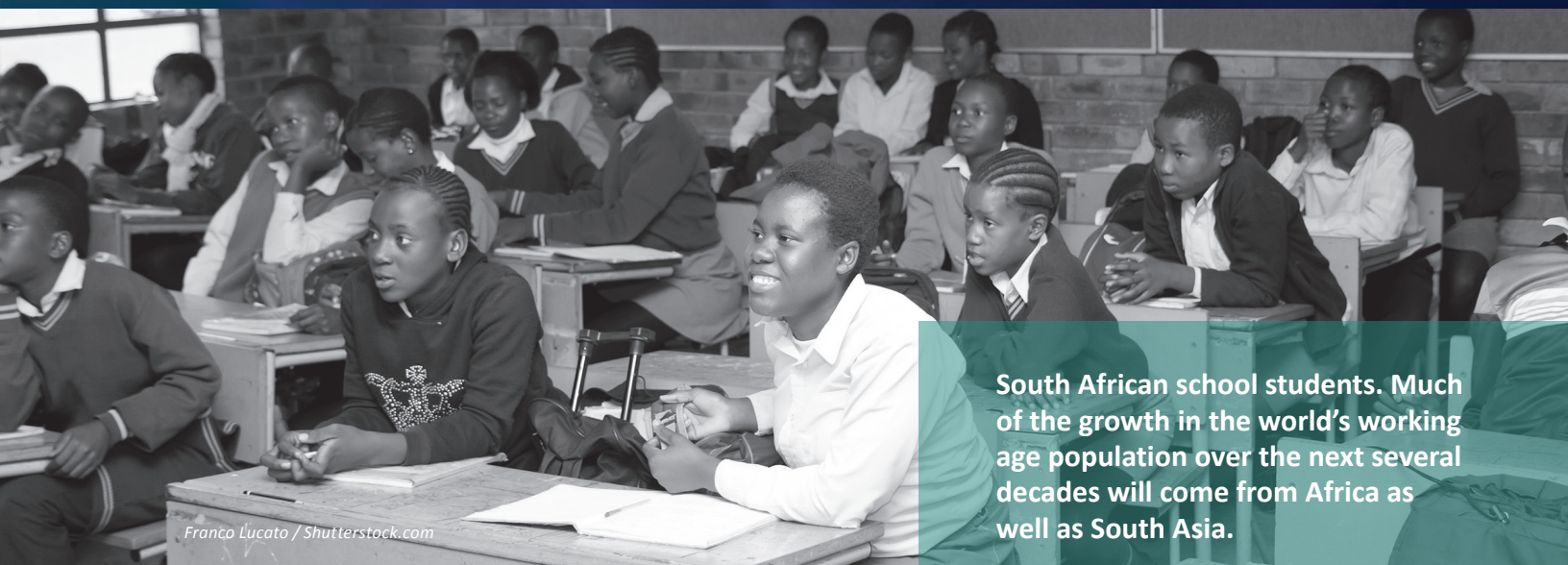
**Governing is getting harder.** Publics will demand governments deliver security and prosperity, but flat revenues, distrust, polarization, and a growing list of emerging issues will hamper government performance. Technology will expand the range of players who can block or circumvent political action. Managing global issues will become harder as actors multiply—to include NGOs, corporations, and empowered individuals—resulting in more ad hoc, fewer encompassing efforts.

**The nature of conflict is changing.** The risk of conflict will increase due to diverging interests among major powers, an expanding terror threat, continued instability in weak states, and the spread of lethal, disruptive technologies. Disrupting societies will become more common, with long-range precision weapons, cyber, and robotic systems to target infrastructure from afar, and more accessible technology to create weapons of mass destruction.

**Climate change, environment, and health issues will demand attention.** A range of global hazards pose imminent and longer-term threats that will require collective action to address—even as cooperation becomes harder. More extreme weather, water and soil stress, and food insecurity will disrupt societies. Sea-level rise, ocean acidification, glacial melt, and pollution will change living patterns. Tensions over climate change will grow. Increased travel and poor health infrastructure will make infectious diseases harder to manage.

### The Bottomline

These trends will converge at an unprecedented pace to make governing and cooperation harder and to change the nature of power—fundamentally altering the global landscape. Economic, technological and security trends, especially, will expand the number of states, organizations, and individuals able to act in consequential ways. Within states, political order will remain elusive and tensions high until societies and governments renegotiate their expectations of one another. Between states, the post-Cold War, unipolar moment has passed and the post-1945 rules based international order may be fading too. Some major powers and regional aggressors will seek to assert interests through force but will find results fleeting as they discover traditional, material forms of power less able to secure and sustain outcomes in a context of proliferating veto players.



Franco Lucato / Shutterstock.com

South African school students. Much of the growth in the world's working age population over the next several decades will come from Africa as well as South Asia.

## TRENDS TRANSFORMING THE GLOBAL LANDSCAPE

The post-Cold War era is giving way to a new strategic context. Recent and future trends will converge during the next 20 years at an unprecedented pace to increase the number and complexity of issues, with several, like cyber attacks, terrorism, or extreme weather, representing risks for imminent disruption. Demographic shifts will stress labor, welfare, and social stability. The rich world is aging while much of the poorer world is not and is becoming more male to boot. More and more people are living in cities, some of which are increasingly vulnerable to sea-level rise, flooding, and storm surges. So, too, more people are on the move—drawn by visions of a better life or driven by horrors of strife. Competition for good jobs has become global, as technology, especially mass automation, disrupts labor markets. Technology will also further empower individuals and small groups, connecting people like never before. At the same time, values, nationalism, and religion will increasingly separate them.

At the national level, the gap between popular expectations and government performance will grow; indeed democracy itself can no longer be taken for granted. Internationally, the empowering of individuals and small groups will make it harder to organize collective action against major global problems, like climate change. International institutions will be visibly more mismatched to the tasks of the future, especially as they awkwardly embrace newly empowered private individuals and groups.

Meanwhile, the risk of conflict will grow. Warring will be less and less confined to the battlefield, and more aimed at disrupting societies—using cyber weapons from afar or suicide terrorists from within. The silent, chronic threats of air pollution, water shortage, and climate change will become more noticeable, leading more often than in the past to clashes, as diagnoses of and measures to deal with these issues remain divisive around the globe.

## The Rich Are Aging, The Poor Are Not

The world's population will be larger, older, and more urban, even as the rate of global population growth slows. The effects on individual countries will vary, however, as the world's major economies age and the developing world remains youthful. The world population is forecasted to jump from roughly 7.3 to 8.8 billion people by 2035. Africa—with fertility rates double those of the rest of the world—and parts of Asia are on course for their working-age populations to soar. This could lead to economic progress or disaster, depending on how well their governments and societies ramp up investment in education, infrastructure, and other key sectors.

**Labor and welfare patterns are set to change dramatically, both in rapidly aging countries and chronically young countries.** People over 60 are becoming the world's fastest growing age cohort. Successful aging societies will increase elderly, youth, and female workforce participation to offset fewer working-age adults. Median ages will reach highs by 2035 in Japan (52.4), South Korea (49.4), Germany (49.6), and in several other countries. Europe will be hit especially hard, as well as Cuba (48), Russia (43.6), and China (45.7). The United States is aging at a slower rate—reaching a median age of approximately 41 by 2035—and will maintain a growing working-age population.

- **Chronically young populations**—with an average age of 25 years or less—will challenge parts of Africa and Asia, especially Somalia, as well as Afghanistan, Pakistan, Iraq, and Yemen. These states historically have been more prone to violence and instability. Even youthful states, however, will have increasing numbers of elderly to support, adding to their needs for infrastructure and socioeconomic safety nets.

Worldwide, the number of people reaching working age during the coming two decades will decline sharply from the previous two—from 1.20 billion in 1995-2015 to 850 million in 2015-35, according to UN projections. Most of these new workers, however, will be in South Asia and Africa, many of them in economies already struggling to create new jobs in the modern global economy due to inadequate infrastructure, limited education systems, corruption, and lack of opportunity for women.

- Integrating more women into the workforce will be particularly challenging due to longstanding cultural norms, but a study by McKinsey Global Institute assesses that such moves could boost output and productivity. According to the study, global GDP could rise by more than 10 percent by 2025 if roles and relative compensation for women across each region were improved to match the levels of the most-equitable country in that region. McKinsey highlighted improvements in education, financial and digital inclusion, legal protection, and compensation for care work as crucial to gains in gender economic equity—and ultimately beneficial to all workers as well.

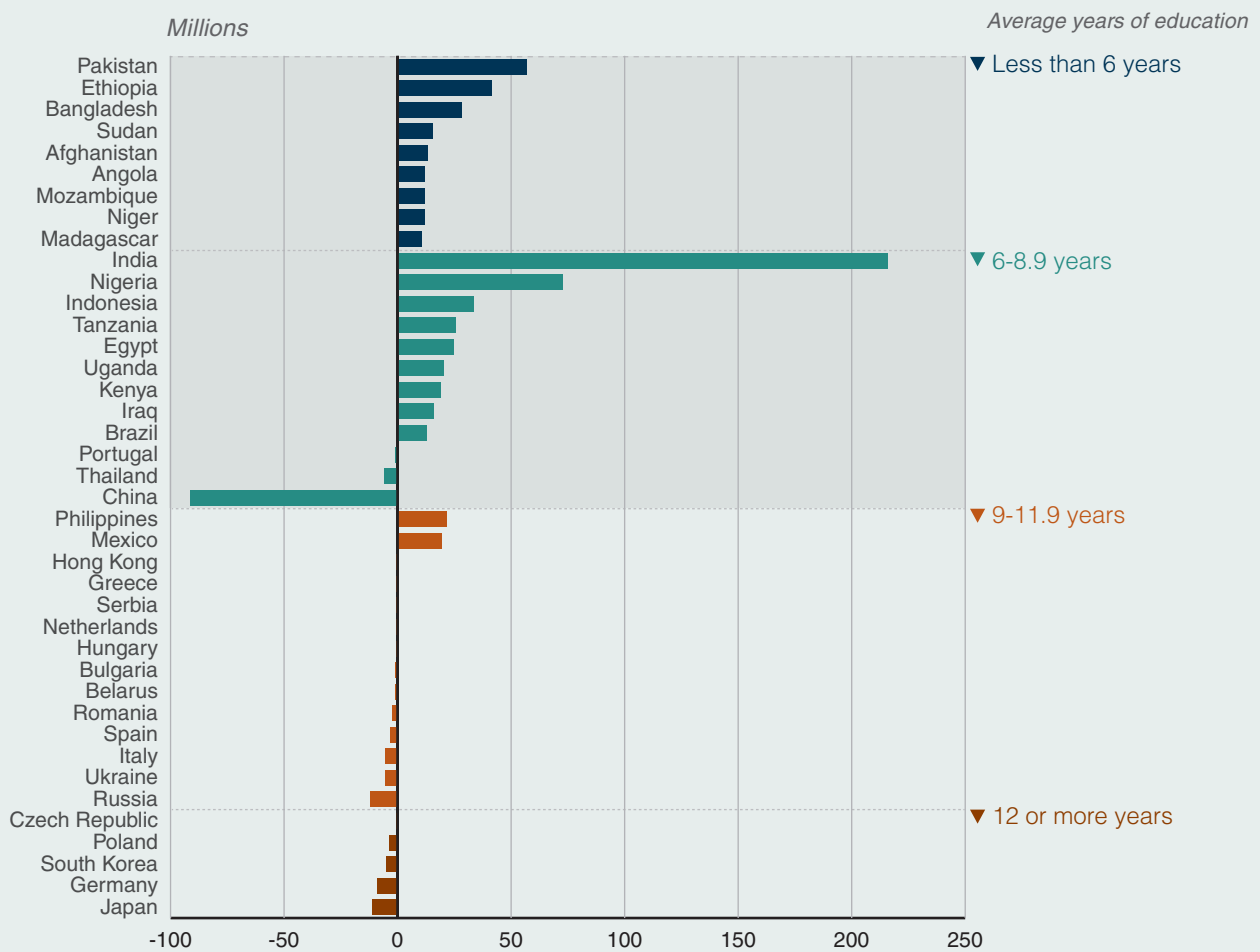
**More People Are Living In Cities.** Demographic trends will boost popular pressure for effective public policy, especially in providing services and infrastructure needed to support increasingly urban populations. Just over half of humanity lives in cities today, a number forecast to rise to two-thirds by 2050. Aging countries that adapt health care, pensions, welfare, employment, and military recruitment systems are likely to successfully weather demographic trends while countries with younger populations would benefit from focusing on education and employment. Immigration and labor policies will remain divisive in the near term,

## Estimated Change in Working-Age (15-64) Population 2015-35, Selected Countries

The world's working-age population will grow the most in South Asian and African countries, where education levels are among the lowest—putting them at a disadvantage in the evolving global economy, which will favor higher-skilled workers.

The biggest working-age decreases will be in China and in Europe, where employment opportunities will probably be greatest for skilled laborers and service-sector workers.

Worldwide, low-value-added manufacturing—historically the steppingstone to economic development for poor countries, and a pathway to prosperity for aspiring workers—will tend toward needing ever-fewer unskilled workers as automation, artificial intelligence, and other manufacturing advances take effect.

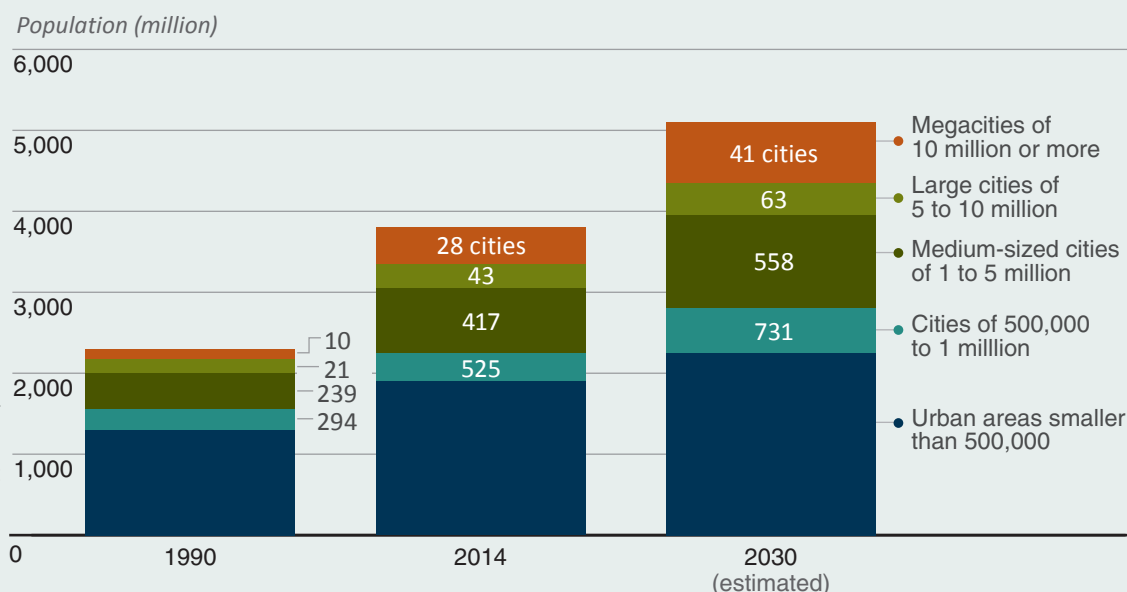


Note: The 40 countries highlighted in this chart are the countries with the largest increases and largest decreases of working-age population, in absolute numbers.  
Source: UN population data (median projection).



## Global Urban Population Growth Is Propelled by the Growth of Cities of All Sizes

The lion's share of the world's 20-percent population increase between 2015 and 2035 will end up in cities, as inflows of people from rural settings join already-growing city populations. Cities of all sizes will continue to increase in number, led by "megacities" of 10 million or more residents, which will be found on every continent except Australia.



Source: United Nations, Department of Economics and Social Affairs, "World Urbanization Prospects, 2014 Revision."

although over time—and with training and education—such policies could address critical labor shortfalls in aging societies.

- Population growth will continue to concentrate in areas vulnerable to sea-level rise, flooding, and storm surges. By 2035, roughly 50 percent more people than in the year 2000 will live in low-elevation coastal zones worldwide, with the number in Asia increasing by more than 150 million and in Africa by 60 million. Many megacities, such as Bangkok, Ho Chi Minh City, Jakarta, and Manila, will continue to sink because of excessive groundwater extraction and natural geologic activity.

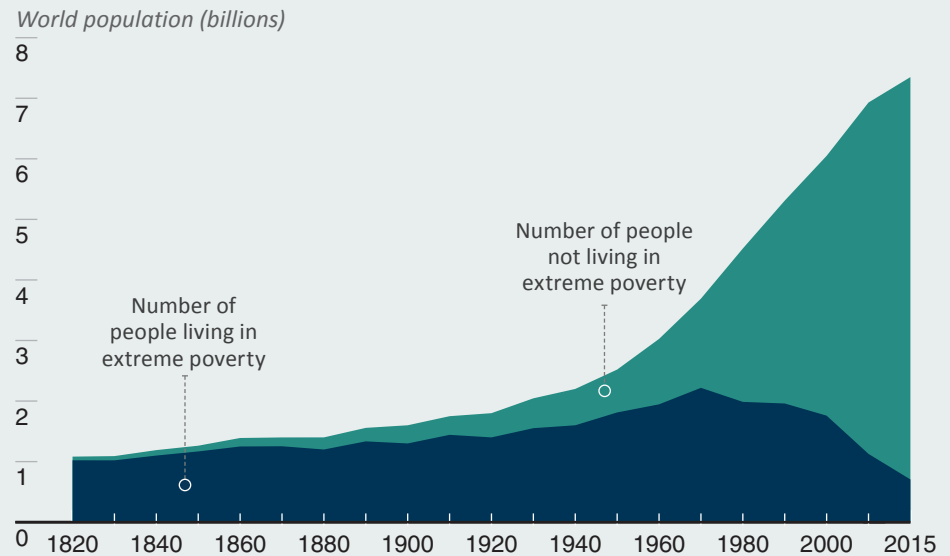
**More Are On The Move . . .** Migration flows will remain high during the next two decades as people seek economic opportunity and flee conflict and worsening environmental conditions. International migrants—or persons who reside outside their countries of birth—and forcibly

displaced persons reached the highest absolute levels ever recorded in 2015, with 244 million international migrants and roughly 65 million displaced persons. In short, one in every 112 persons in the world is a refugee, an internally displaced person, or an asylum seeker. Growth in the number of international migrants, refugees, asylum seekers, and internally displaced persons is likely to continue due to major income disparities between areas, persistent conflicts, and festering ethnic and religious tensions. The number of people on the move will remain high or even increase as environmental stresses become more pronounced.

**. . . And More Are Male.** The recent increase in men compared to women in many countries in the Middle East and in East and South Asia signals countries under stress and the lasting influence of culture. Largely due to sex-selective abortion, female infanticide, and female selective neglect, China and India are already seeing significant numbers of men without

## World Population Living in Extreme Poverty, 1820-2015

Extreme poverty is defined as living at a consumption (or income) level below \$1.90 per day in real, purchasing-power parity terms (adjusted for price differences between countries and inflation).



Source: OurWorldinData.org Max Roser based on World Bank and Bourguignon and Morrisson.

prospects for marriage. Gender imbalances take decades to correct, generating increased crime and violence in the meantime.

### The Global Economy Is Shifting

Economies worldwide will shift significantly in the near and distant futures. Wealthy economies will try to halt recent declines in economic growth and maintain lifestyles even as working-age populations shrink and historically strong productivity gains wane. The developing world will seek to maintain its recent progress in eradicating abject poverty and to integrate rapidly growing working-age populations into its economies. Developed and developing alike will be pressed to identify new services, sectors, and occupations to replace manufacturing jobs that automation and other technologies will eliminate—and to educate and train workers to fill them.

**Extreme Poverty Is Declining.** Economic reforms in China and other countries, largely in Asia, have fueled a historic rise in living standards for nearly a billion people since 1990, cutting the share of the world living in “extreme poverty” (below \$2 a day) from 35 to around 10 percent. Two dollars a day hardly makes life easy but does move people beyond surviving day-to-day. Improved living standards, however, lead to changed behaviors while raising expectations and anxieties about the future.

**Western Middle Classes Are Squeezed.** A global boom in low-cost manufacturing—together with automation driven in part by cost pressures from increased competition—hit US and European middle-class wages and employment hard over the past several decades. At the same time, however, it brought new opportunities to the developing world and dramatically reduced the costs of goods for consumers worldwide.

Stagnant wages are the most dramatic sign of the relentless drive for increased cost-efficiency: real median household incomes in the United States, Germany, Japan, Italy, and France rose by less than 1 percent per year from the mid-1980s through the Global Financial Crisis in 2008, according to the OECD. The post-crisis period has brought little respite, notwithstanding some improvement in the United States in 2015. McKinsey estimated that as of 2014, two-thirds of households in developed economies had real incomes at or below their 2005 levels.

**Growth Will Be Weak.** During the next five years, the global economy will continue to struggle to resume growth, as the world's major economies slowly recover from the 2008 crisis and work through sharp increases in public-sector debt. Moreover, the global economy also will face political pressures threatening open trade just as China undertakes a massive effort to redirect its economy toward consumption-based growth. As a consequence, most of the world's largest economies are likely to experience, at least in the near term, performance that is sub-par by historical standards. Weak growth will threaten recent gains in reducing poverty.

- China and the European Union (EU)—two of the world's three largest economies—will continue to attempt major, painful changes to bolster longer-term growth. China will be the biggest wildcard, as it attempts to continue raising living standards while shifting away from a state-directed, investment-driven economy to one that is consumer- and service-centered. Meanwhile, the EU is trying to foster stronger economic growth while struggling to manage high debt levels and deep political divisions over the future of the EU project.

- Financial crises, the erosion of the middle class, and greater public awareness of income inequality—all with roots predating the 2008 downturn—have fed sentiment in the West that the costs of trade liberalization outweigh the gains. As a result, the historic, 70-year run of global trade liberalization faces a major backlash, undermining future prospects for further liberalization—and raising the risk of greater protectionism. The world will be closely watching the United States and other traditional supporters of trade for signs of policy retrenchment. Further liberalization of free trade may be limited to more narrow issues or sets of partners.

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Imagining a surprise  
news headline in 2018 . . .

### **“Robin Hoodhacker” Paralyzes Online Commerce, Upends Markets**

**Nov. 19, 2018 – New York**

Online commerce ground to a halt a week before the Christmas shopping season started in the United States, Canada, and Europe after numerous attacks by the persona “Robin Hoodhacker.” The attacks created chaos by altering online payment accounts by as much as \$100,000 in credit or debts—sparking a frenzy of online shopping that has forced retailers to shut down all digital transactions. The disruption sent global financial markets into a free fall before trading was suspended in most exchanges due to uncertainty about how long and widely the hacking would persist.

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## Changes in Real Income by World Income Percentiles (at Purchasing Power Parity) From 1988 to 2008

The “Elephant Chart,” showing real household income changes between 1989 and 2008, shows that the period of the greatest globalization of the world economy—and the rapid growth it fostered in the developing world—brought large income gains to all but the very poorest of the bottom two-thirds of the world’s households, and to the world’s very wealthiest. The chart—and subsequent variations to it, which show slightly different relative gains between groups but the same broad pattern—suggests that globalization and advanced manufacturing brought relatively little gain to the top third of the world’s households apart from the very wealthiest. This segment includes many of the lower-to-middle-income households of the US and other advanced economies.

The data behind the chart only shows changes for each income percentile; individual households in any country could have moved up or down within percentiles and as a result seen substantially larger—or smaller—gains than these global averages.



Source: Branko Milanovic.



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## Financial Shocks and Economic Doldrums

Debt-fueled economic growth in the United States, Europe, China, and Japan during the past several decades led to real-estate bubbles, unsustainable personal spending, price spikes for oil and other commodities—and, ultimately, in 2008, to massive financial crises in the United States and Europe that undercut economies worldwide. Anxious to stimulate greater growth, some central banks lowered interest rates to near—and even below—zero. They also attempted to boost recovery through quantitative easing, adding more than \$11 trillion to the balance sheets of the central banks of China, the EU, Japan, and the United States between 2008 and 2016.

These efforts prevented further defaults of major financial institutions and enabled beleaguered European governments to borrow at low rates. They have not sparked strong economic growth, however, because they have not spurred governments, firms, or individuals to boost spending. Equally important, these efforts have not created incentives for banks to increase lending to support such spending, amid new prudential standards and near-zero or even negative inflation.

Efforts by Beijing, for example, to stoke growth since 2008 have helped maintain oil and raw-materials markets, as well as the producers in Africa, Latin America, and the Middle East who supply them. Nonetheless, these markets have sagged with the realization that China's growth—based largely on investment to boost industrial capacity—is unsustainable.

In this low-rate, low-growth environment, investors have remained skittish. They have vacillated between seeking higher returns in emerging markets and seeking safehavens during periodic scares, providing only unreliable support for potential emerging-economy growth.

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## Technology Complicates the Long-Term Outlook

Most of the world's largest economies will struggle with shrinking working-age populations, but all countries will face the challenge of maintaining employment—and developing well-trained, resilient workers. Automation, artificial intelligence (AI), and other technological innovations threaten the existence of vast swaths of current jobs up and down the socioeconomic ladder, including high-technology manufacturing and even white-collar services.

- Finding new ways to boost productivity in rich countries will become more difficult. The demographic, improved-efficiency,

and investment factors behind the post-World War II period of growth are fading. This challenge will be especially relevant as populations in the largest economies age. Advances in technology will help boost productivity in developed and developing countries alike, but improving education, infrastructure, regulations, and management practices will be critical to take full advantage of them.

- As technology increasingly substitutes for labor and puts downward pressure on wages, personal-income-based tax revenues will grow more slowly than economies—or even shrink in real terms.

Fiscal pressure on countries that rely on such taxes will increase, possibly making value-added taxes or other revenue schemes more attractive.

## Technological Innovation Accelerates Progress but Leads to Discontinuities

Technology—from the wheel to the silicon chip—has greatly bent the arc of history, but anticipating when, where, and how technology will alter economic, social, political, and security dynamics is a hard game. Some high-impact predictions—such as cold fusion—still have not become realities long after first promised. Other changes have unfolded faster and further than experts imagined. Breakthroughs in recent years in gene editing and manipulation, such as CRISPR,<sup>a</sup> are opening vast new possibilities in biotechnology.

Technology will continue to empower individuals, small groups, corporations, and states, as well as accelerate the pace of change and spawn new complex challenges, discontinuities, and tensions. In particular, the development and deployment of advanced information communication technologies (ICT), AI, new materials and manufacturing capabilities from robotics to automation, advances in biotechnology, and unconventional energy sources will disrupt labor markets; alter health, energy, and transportation systems; and transform economic development. They will also raise fundamental questions about what it means

to be human. Such developments will magnify values differences across societies, impeding progress on international regulations or norms in these areas. Existential risks associated with some of these applications are real, especially in synthetic biology, genome editing, and AI.

**ICT** are poised to transform a widening array of work practices and the way people live and communicate. The associated technologies will increase efficiencies and alter employment in transportation, engineering, manufacturing, health care and other services. These tools have been around for some time, but will become increasingly mainstream as developers learn to break down more jobs into automated components. Skyrocketing investment in AI, surging sales of industrial and service robotics, and cloud-based platforms operating without local infrastructure will create more opportunities for convergence and more disruption—especially in the near term—to labor markets. The “Internet of Things” (IOT)—where more and more interconnected devices can interact—will create efficiencies but also security risks. The effects of new ICTs on the financial sector, in particular, are likely to be profound. New financial technologies—including digital currencies, applications of “blockchain” technology for transactions, and AI and big data for predictive analytics—will reshape financial services, with potentially substantial impacts on systemic stability and the security of critical financial infrastructure.

**Biotechnologies** are at an inflection point, where advances in genetic testing and editing—catalyzed by the new methods to manipulate genes—are turning science fiction into reality. The time and cost required to sequence a person’s genome has been slashed. Such capabilities open the possibility of much more tailored approaches to enhancing human capabilities, treating diseases, extending longevity, or boosting food production. Given

<sup>a</sup>CRISPR is the acronym for “Clustered Regularly Interspaced Short Palindromic Repeats,” which refers to short segments of DNA, the molecule that carries genetic instructions for all living organisms. A few years ago, the discovery was made that one can apply CRISPR with a set of enzymes that accelerate or catalyze chemical reactions in order to modify specific DNA sequences. This capability is revolutionizing biological research, accelerating the rate at which biotech applications are developed to address medical, health, industrial, environmental, and agricultural challenges, while also posing significant ethical and security questions.

that most early techniques will only be available in a few countries, access to these technologies will be limited to those who can afford to travel and pay for the new procedures; divisive political debates over access are likely to ensue.

**Further development of advanced materials and manufacturing techniques** could speed transformation of key sectors, such as transportation and energy. The global market for nanotechnology has more than doubled in recent years, with applications constantly expanding from electronics to food.

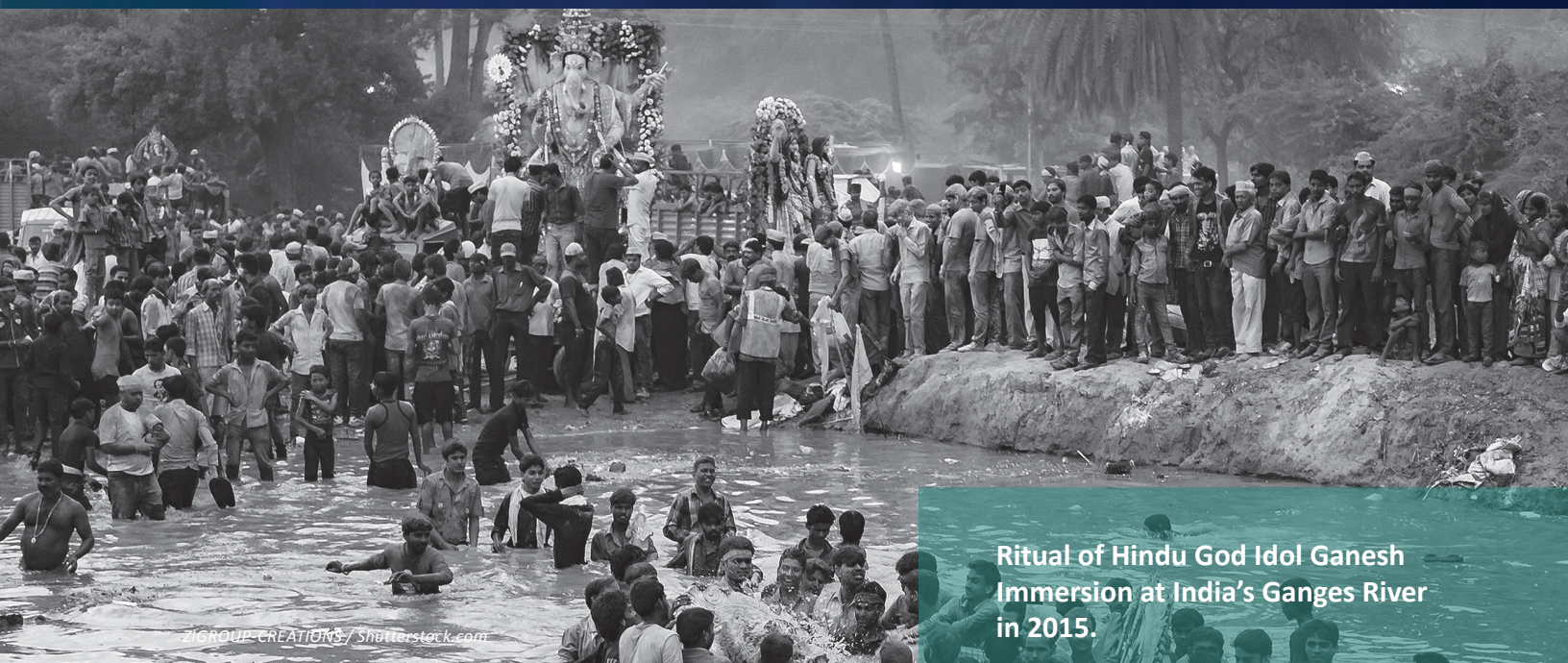
*The unconventional energy revolution* is increasing the availability of new sources of oil and natural gas, while a wide range of technological advancements on the demand side are breaking the link between economic growth and rising energy utilization. Advancements in solar panels, for example, have drastically reduced the cost of solar electricity to be competitive with the retail price of electricity. With more new energy sources, overall global energy costs will remain low and the global energy system will become increasingly resilient to supply shocks from fossil fuels, to the benefit, in particular, of China, India, and other resource-poor developing countries.

Emerging technologies will require careful parsing to appreciate both the technology and its cumulative effects on human beings, societies, states, and the planet. There is a near-term imperative to establish safety standards and common protocols for emerging ICT, biotechnologies, and new materials. Few organizations—whether governmental, commercial, academic, or religious—have the range of expertise needed to do the parsing, let alone explain it to the rest of us, underscoring the importance of pooling resources to assess and contemplate the challenges ahead.

- Without regulatory standards, the development and deployment of AI—even if less capable than human intellect—is likely to be inherently dangerous to humans, threaten citizens’ privacy, and undermine state interests. Further, failure to develop standards for AI in robotics is likely to lead to economic inefficiencies and lost economic opportunities due to non-interoperable systems.
- Biopharmaceutical advances will generate tension over intellectual property rights. If patent rejections, revocations, and compulsory licenses become more widespread, they could threaten innovation of new medicines and undercut the profits of multinational pharmaceutical companies. Governments will have to weigh the economic and social benefits of adopting new biotechnologies—such as genetically engineered (GE) crops—against competing domestic considerations.

Internationally, the ability to set standards and protocols, define ethical limits for research, and protect intellectual property rights will devolve to states with technical leadership. Actions taken in the near-term to preserve technical leadership will be especially critical for technologies that improve human health, change biological systems, and expand information and automation systems. Multilateral engagement early in the development cycle has the potential to reduce international tensions as deployment approaches. This, however, will require a convergence of interests and values—even if narrow and limited. More likely, technical leadership and partnerships alone will be insufficient to avoid tensions as states pursue technologies and regulatory frameworks that work to their benefit.





Ritual of Hindu God Idol Ganesh  
Immersion at India's Ganges River  
in 2015.

## Ideas and Identities Will Exclude

A more interconnected world will continue to increase—rather than reduce—differences over ideas and identities. Populism will increase over the next two decades should current demographic, economic, and governance trends hold. So, too, will exclusionary national and religious identities, as the interplay between technology and culture accelerates and people seek meaning and security in the context of rapid and disorienting economic, social, and technological change. Political leaders will find appeals to identity useful for mobilizing supporters and consolidating political control. Similarly, identity groups will become more influential. Growing access to information and communication tools will enable them to better organize and mobilize—around political issues, religion, values, economic interests, ethnicity, gender, and lifestyle. The increasingly segregated information and media environment will harden identities—both through algorithms that provide customized searches and personally styled social media, as well as through deliberate

shaping efforts by organizations, governments, and thought leaders. Some of these identities will have a transnational character, with groups learning from one another and individuals able to seek inspiration from like-minds a world away.

A key near-term implication of rising identity politics is the erosion of traditions of tolerance and diversity associated with the United States and Western Europe, threatening the global appeal of these ideals. Other key implications include the explicit use of nationalism and threatening characterizations of the West to shore up authoritarian control in China and Russia, and the inflaming of identity conflicts and communal tensions in Africa, the Middle East and South Asia. How New Delhi treats Hindu nationalist tendencies and Israel balances ultra-orthodox religious extremes will be key determinants, for example, of future tensions.

**Populism** is emerging in the West and in parts of Asia. Characterized by a suspicion and hostility toward elites, mainstream politics, and established institutions, it reflects rejection of the economic effects of globalization and



frustration with the responses of political and economic elites to the public's concerns. Both right-wing and left-wing populist parties have been rising across Europe—as leaders of political parties in France, Greece, and the Netherlands, for example, criticize established organizations for failing to protect the livelihood of European residents. South America has had its own waves of populism, as have the Philippines and Thailand.

- Moreover, anti-immigrant and xenophobic sentiment among core democracies of the Western alliance could undermine some of the West's traditional sources of strength in cultivating diverse societies and harnessing global talent.
- Populist leaders and movements—whether on the right or left—may leverage democratic practices to foster popular support for consolidation of power in a strong executive and the slow, steady erosion of civil society, the rule of law, and norms of tolerance.

**Nationalist and Some Religious Identities.** A close cousin to populism, nationalist appeals will be prominent in China, Russia, Turkey, and other countries where leaders seek to consolidate political control by eliminating domestic political alternatives while painting international relations in existential terms. Similarly, exclusionary religious identities will shape regional and local dynamics in the Middle East and North Africa and threaten to do so in parts of Sub-Saharan Africa between Christian and Muslim communities. In Russia, nation and religion will continue to converge to reinforce political control.

- Religious identity, which may or may not be exclusionary, is likely to remain a potent connection as people seek a greater sense of identity and belonging in times of intense change. Over 80 percent of the world is religiously affiliated and that share

is increasing, due largely to high fertility rates in the developing world, according to a Pew Research Center study on the future of religion. Studies of American politics indicate that religiosity, or the *intensity* of individual expressions of faith, is a better predictor of voter behavior than the particular faith a person follows.

## Governing Is Harder and Harder

How governments govern and create political order is in flux and likely to vary even more over the coming decades. Governments will increasingly struggle to meet public demands for security and prosperity. Fiscal limits, political polarization, and weak administrative capacity will complicate their efforts, as well as the changing information environment, the growing stock of issues that publics expect governments to manage, and the proliferation of empowered actors who can block policy formation or implementation. This gap between government performance and public expectations—combined with corruption and elite scandals—will result in growing public distrust and dissatisfaction. It will also increase the likelihood of protests, instability, and wider variations in governance.

- High-profile protests in places like Brazil and Turkey—countries where middle classes have expanded during the past decade—indicate that more prosperous citizens are expecting better, less corrupt governments and society. They are also looking for protection from losing what they have gained. Meanwhile, slower growth, stagnant middle-class wages, and rising inequality in developed countries will continue to drive public demands to improve and protect living standards. This will occur at a time when many governments are constrained by more debt, more intense global economic

competition, and swings in financial and commodity markets.

- Greater public access to information about leaders and institutions—combined with stunning elite failures such as the 2008 financial crisis and Petrobras corruption scandal—has undermined public trust in established sources of authority and is driving populist movements worldwide. Moreover, information technology’s amplification of individual voices and of distrust of elites has in some countries eroded the influence of political parties, labor unions, and civic groups, potentially leading to a crisis of representation among democracies. Polls suggest that majorities in emerging nations, especially in the Middle East and Latin America, believe government officials “don’t care about people like them,” while trust in governments has dropped in developed countries as well. Americans demonstrate the lowest levels of trust in government since the first year of measurement in 1958.
- Democracy itself will be more in question, as some studies suggest that North American and Western European youth are less likely to support freedom of speech than their elders. The number of states that mix democratic and autocratic elements is on the rise, a blend that is prone to instability. Freedom House reported that measurements of “freedom” in 2016 declined in almost twice as many countries as it improved—the biggest setback in 10 years.

**International institutions** will struggle to adapt to a more complex environment but will still have a role to play. They will be most effective when the interests of the major powers align on issues like peacekeeping and humanitarian assistance,

where institutions and norms are well in place. Future reforms of international and regional institutions will move slowly, though, because of divergent interests among member states and organizations and the increasing complexity of emerging global issues. Some institutions and member countries will continue to cope on an ad hoc basis, taking steps to partner with nonstate actors and regional organizations and preferring approaches targeting narrowly defined issues.

- *A rise in veto power.* Competing interests among major and aspiring powers will limit formal international action in managing disputes, while divergent interests among states in general will prevent major reforms of the UN Security Council’s membership. Many agree on the need to reform the UN Security Council, but prospects for consensus on membership reform are dim.
- *Lagging behind.* Existing institutions are likely to wrestle with nontraditional issues such as genome editing, AI, and human enhancement because technological change will continue to far outpace the ability of states, agencies, and international organizations to set standards, policies, regulations, and norms. Cyber and space also will raise new challenges, especially as private commercial actors play a bigger role in shaping capabilities and norms of use.
- *Multi-stakeholder multilateralism.* Multilateral dynamics will expand as formal international institutions work more closely with companies, civil society organizations, and local governments to address challenges. As experimentation with multi-stakeholder forums grows, new formats for debate will arise, and private sector involvement in governance is likely to increase.

## The Nature of Conflict is Changing

The risk of conflict, including interstate conflict, will increase during the next two decades due to evolving interests among major powers, ongoing terrorist threats, continued instability in weak states, and the spread of lethal and disruptive technologies. The decline in the number and intensity of conflicts during the past 20 years appears to be reversing: conflict levels are increasing and battle-related deaths and other human costs of conflict are up sharply since 2011—if not earlier—according to published institutional reports. Furthermore, the character of conflict is changing because of advances in technology, new strategies, and the evolving global geopolitical context—all of which challenge previous conceptions of warfare. More actors will employ a wider range of military and non-military tools, blurring the line between war and peace and undermining old norms of escalation and deterrence.

Future conflicts will increasingly emphasize the disruption of critical infrastructure, societal cohesion, and basic government functions in order to secure psychological and geopolitical advantages, rather than the defeat of enemy forces on the battlefield through traditional military means. Noncombatants will be increasingly targeted, sometimes to pit ethnic, religious, and political groups against one another to disrupt societal cooperation and coexistence within states. Such strategies suggest a trend toward increasingly costly, but less decisive conflicts.

**Disruptive Groups.** Nonstate and substate groups—including terrorists, insurgents, activists, and criminal gangs—are accessing a broader array of lethal and non-lethal means to advance their interests. Groups like Hizballah and ISIL have gained access to sophisticated weaponry during the last decade, and man-portable anti-tank missiles, surface-to-air missiles, unmanned drones and other precision-guided

weapons are likely to be more common. Activist groups like Anonymous are likely to employ increasingly disruptive cyber attacks. These groups have relatively little reason to restrain themselves. Since deterrence is harder, states have had to go on the offense and attack these actors more aggressively, which sometimes feeds the groups' ideological causes.

**War From Afar.** Meanwhile, both state and nonstate actors will continue to develop a greater capacity for stand-off and remote attacks. Growing development of cyber attacks, precision-guided weapons, robotic systems and unmanned weapons lowers the threshold for initiating conflict because attackers put fewer lives at risk in their attempts to overwhelm defenses. The proliferation of these capabilities will shift warfare from direct clashes of opposing armies to more stand-off and remote operations, especially in the initial phases of conflict.

- A future crisis in which opposing militaries possess long-range, precision-guided conventional weapons risks quick escalation to conflict because both sides would have an incentive to strike before they were attacked.
- In addition, the command, control, and targeting infrastructure, including satellites that provide navigation and targeting information, would probably become targets of attacks for forces seeking to disrupt an enemy's strike capabilities. Russia and China, for example, continue to pursue weapons systems capable of destroying satellites on orbit, which will place US and others' satellites at greater risk in the future.

**New WMD Concerns.** The threat posed by nuclear and other forms of weapons of mass destruction (WMD) probably will increase in the years ahead due to technology advances and growing asymmetry between forces. Current

nuclear weapon states will almost certainly continue to maintain, if not modernize, their nuclear forces out to 2035. Nuclear sabre-rattling by North Korea and uncertainty over Iran's intentions could drive others to pursue nuclear capabilities. The proliferation of advanced technologies, especially biotechnologies, will also lower the threshold for new actors to acquire WMD capabilities. Internal collapse of weak states could also open a path for terrorist WMD use resulting from unauthorized seizures of weapons in failing or failed states that no longer can maintain control of their arsenals or scientific and technical knowledge.

### Space

Once the domain only of major powers, space is increasingly democratic. As budgets for national space agencies plateau, private industry will fill the void and pursue serious programs such as space tourism, asteroid mining, and inflatable space habitats. Full realization of their commercial potential, however, is probably decades away.

An increase in space activity brings risks as well, and international action may be necessary to identify and remove the debris most threatening to an expanding global space presence. The immense strategic and commercial value offered by outer space assets ensures that space will increasingly be an arena in which nations vie for access, use, and control. The deployment of antisatellite technologies designed to purposefully disable or destroy satellites could potentially intensify global tensions. A key question will be whether spacefaring countries—in particular China, Russia, and the United States—can agree to a code of conduct for outer space activities.

***“Gray Zone” Conflicts.*** The blurring line between “peacetime” and “wartime” will make it harder for adversaries to rely on traditional calculations of deterrence and escalation in managing conflicts. Strong-arm diplomacy, media manipulation, covert operations, political subversion, and economic coercion are longstanding pressure tactics, but the ease and effectiveness of launching cyber disruptions, disinformation campaigns, and surrogate attacks are heightening tensions and uncertainty. The ability to stay below the threshold for a full-scale war will lead to more persistent economic, political and security competition in the “gray zone” between peacetime and war.

### Climate Change Looms

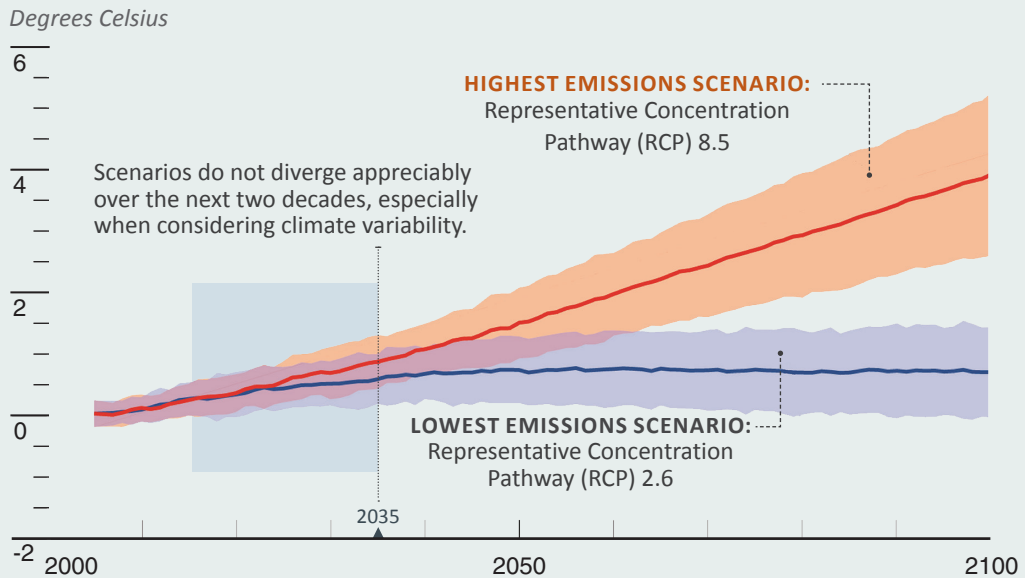
A changing climate, increasing stress on environmental and natural resources, and deepening connection between human and animal health reflect complex systemic risks that will outpace existing approaches. The willingness of individuals, groups, and governments to uphold recent environmental commitments, embrace clean energy technologies, and prepare for unforeseen extreme environmental and ecological events will test the potential for cooperation on global challenges to come.

***Climate Change.*** Changes in the climate will produce more extreme weather events and put greater stress on humans and critical systems, including oceans, freshwater, and biodiversity. These changes, in turn, will have direct and indirect social, economic, political, and security effects. Extreme weather can trigger crop failures, wildfires, energy blackouts, infrastructure breakdown, supply-chain breakdowns, migration, and infectious disease outbreaks. Such events will be more pronounced as people concentrate in climate-vulnerable locations, such as cities, coastal areas, and water-stressed regions. Specific



## Projected Average Surface Temperature Change

The bold curves represent averages in global surface temperatures determined from computer modeling, but the actual trajectory will have many peaks (higher than average) and valleys (lower than average). The peaks are qualitatively important because they probably represent snapshots of future average climate conditions.



Source: Intergovernmental Panel on Climate Change, Fifth Assessment Report, September 2013.

extreme weather events remain difficult to attribute entirely to climate change, but unusual patterns of extreme and record-breaking weather events are likely to become more common, according to the Intergovernmental Panel on Climate Change (IPCC).

Past greenhouse gas emissions already have locked in a significant rise in global mean temperatures for the next 20 years, no matter what greenhouse gas reduction policies are now being implemented. Most scientists expect that climate change will exacerbate current conditions, making hot, dry places hotter and drier, for example.

- Over the longer term, global climatological stresses will change how and where people live, as well as the diseases they face. Such stresses include sea-level rise, ocean acidification, permafrost and glacial melt, air quality degradation, changes in cloud

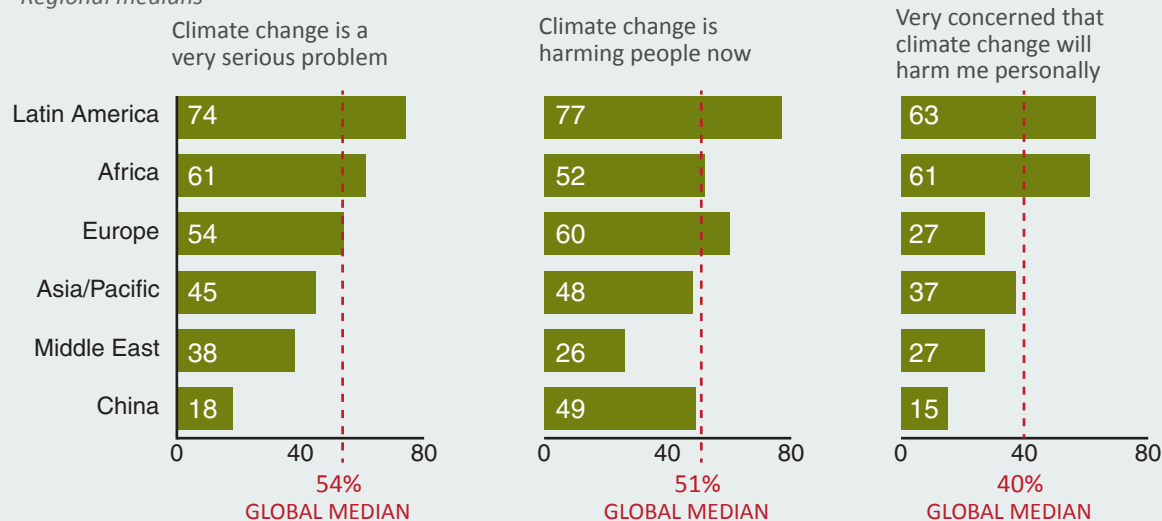
cover, and sustained shifts in temperature and precipitation.

- Current climate models project long-term increases in global average surface temperatures, but climate scientists warn that more sudden, dramatic shifts could be possible, given the complexity of the system and climate history. Such shifts in the climate or climate-linked ecosystems could have dramatic economic and ecological consequences.

Climate change—whether observed or anticipated—will become integral to how people view their world. Many ecological and environmental stresses cut across state borders, complicating the ability of communities and governments to manage their effects. The urgency of the politics will vary due to differences in the intensity and geography of such change. We expect to see increased

## Latin America, Africa More Concerned About Climate Change Compared With Other Regions

*Regional medians*



Note: In the United States: 45 percent said “climate change is a very serious problem,” 41 percent said “climate change is harming people now,” and 30 percent said they were “very concerned that climate change will harm me personally.”

Source: Pew Research Center. Spring 2015 Global Attitudes survey. Q32, Q41, and Q42.

popular pressure globally to address these concerns as citizens in the developing world gain awareness and a growing political voice.

- China’s experience is a cautionary one for today’s developing world, with new members of the middle class expressing greater concern about pollution, water quality, and basic livability. A 2016 Pew poll found that half of Chinese polled were willing to trade economic growth for cleaner air.

Climate change and related natural disasters, policy decisions, and new abatement technologies will create new investment and industry winners and losers, too. One large financial consultant forecasts that developed-country equity markets will see sustained declines in most sectors over the next 35 years due to concerns about climate change. Meanwhile, most of the sectors in developed

country equity markets will see investment gains. Agriculture, infrastructure, and real estate are also expected to benefit through 2050. Financial costs from droughts, storms, floods, and wildfires have risen modestly but consistently since at least the 1970s, according to research by development and humanitarian relief agencies worldwide—and are set to increase with more frequent and severe occurrences in the coming decades.

Climate change will drive both geopolitical competition and international cooperation as well. China, poised for global leadership on climate change, would likely keep to its Paris commitments but could weaken its support for monitoring mechanisms and gain favor with developing world emitters like India. Tensions over managing climate change could sharpen significantly if some countries pursue geoengineering technologies in an effort to manipulate large-scale climate conditions. Early

Imagining a surprise  
news headline in 2033 . . .

## Bangladesh Climate Geoengineering Sparks Protests

April 4, 2033 – Dhaka

Bangladesh became the first country to try to slow climate change by releasing a metric ton of sulfate aerosol into the upper atmosphere from a modified Boeing 797 airplane in the first of six planned flights to reduce the warming effects of solar radiation. The unprecedented move provoked diplomatic warnings by 25 countries and violent public protests at several Bangladeshi Embassies, but government officials in Dhaka claimed its action was “critical to self-defense” after a spate of devastating hurricanes, despite scientists’ warnings of major unintended consequences, such as intensified acid rain and depletion of the ozone layer.

research efforts largely live in computer models to explore techniques to alter temperature and rainfall patterns such as injecting aerosols in the stratosphere, chemically brightening marine clouds, and installing space-mirrors in orbit. Other approaches focus on removing carbon dioxide from the atmosphere. Given the lack of international standards or regulations for such activities, any efforts to test or implement large-scale geoengineering techniques would raise tensions over the risks and potential unintended consequences.

**Environment and Natural Resources.** Nearly all of the Earth’s systems are undergoing natural and human-induced stresses outpacing national and international environmental protection efforts. Institutions overseeing single sectors

will increasingly struggle to address the complex interdependencies of water, food, energy, land, health, infrastructure, and labor.

- By 2035, outdoor **air pollution** is projected to be the top cause of environmentally related deaths worldwide, absent implementation of new air quality policies. More than 80 percent of urban dwellers are already exposed to air pollution that exceeds safe limits, according to the World Health Organization.
- Half of the world’s population will face **water shortages** by 2035, according to the UN. Rising demands from population growth, greater consumption, and agricultural production will outstrip water supplies, which will become less reliable in some regions from groundwater depletion and changing precipitation patterns. More than 30 countries—nearly half of them in the Middle East—will experience extremely high water stress by 2035, increasing economic, social and political tensions.
- **Melting ice** in the Arctic and Antarctica will accelerate sea level rise over time. An increasingly navigable Arctic will shorten commercial trading routes and expand access to the region’s natural resources in the decades ahead. Glacier melting in the Tibetan Plateau—the source of nearly all of Asia’s major rivers—will also have far-reaching consequences.
- More than a third of the world’s **soil**, which produces 95 percent of the world’s food supply, is currently degraded, and the fraction will probably increase as the global population grows. Soil degradation—the loss of soil productivity due to primarily human-induced changes—is already occurring at rates as much as 40 times faster than new soil formation.

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### Sharing Water Will Be More Contentious

A growing number of countries will experience water stress—from population growth, urbanization, economic development, climate change, and poor water management—and tensions over shared water resources will rise. Historically, water disputes between states have led to more sharing agreements than violent conflicts, but this pattern will be hard to maintain. Dam construction, industrial water pollution, and neglect or non-acceptance of existing treaty provisions aggravate water tensions, but political and cultural stress often play an even larger role.

Nearly half of the world's 263 international river basins lack cooperative management agreement as well as only a handful of the more than 600 transboundary aquifer systems. Moreover, many existing agreements are not sufficiently adaptive to address emergent issues such as climate change, biodiversity loss, and water quality. Ongoing disputes in key river basins, such as the Mekong, Nile, Amu Darya, Jordan, Indus, and the Brahmaputra, will illustrate how water governance structures adapt in an era of increasingly scarce resources.

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- Diversity in the **biosphere** will continue to decline despite ongoing national and international efforts. Climate change will increasingly amplify ongoing habitat loss and degradation, overexploitation, pollution, and invasive alien species—adversely affecting forests, fisheries, and wetlands. Many marine ecosystems, particularly coral reefs, will face critical risks from warming and acidifying oceans.

**Health.** Human and animal health will increasingly be interconnected. Increasing global connectivity and changing environmental conditions will affect the geographic distribution of pathogens and their hosts, and, in turn, the emergence, transmission, and spread of many human and animal infectious diseases. Unaddressed deficiencies in national and global health systems for disease control will make infectious disease outbreaks more difficult to detect and manage, increasing the potential for epidemics to break out far beyond their points of origin.

- Noncommunicable diseases, however—such as heart disease, stroke, diabetes, and mental illness—will far outpace infectious diseases over the next decades, owing to demographic and cultural factors, including aging, poor nutrition and sanitation, urbanization, and widening inequality.

### Converging Trends Will Transform Power and Politics

**Together, these global trends will make governing harder while altering what it means to exert power. The number and complexity of issues beyond the scope of any one individual, community, or state to address is increasing—and doing so at a seemingly faster pace than decades ago. Issues once considered long-term will more frequently impose near-term effects.**

For example, complex, interdependencies like climate change and nefarious or negligent applications of biotechnologies have the potential to degrade and destroy human life. Cyber and information technologies—complex systems on which humans are increasingly dependent—will continue to create new forms of commerce, politics, and conflict with implications that are not immediately understood.



**Economic, technological, and security trends are increasing the number of states that can exert geopolitical influence, bringing the unipolar post-Cold War period to a close.**

The economic progress of the past century has widened the number of states—Brazil, China, India, Indonesia, Iran, Mexico, and Turkey—with material claims to great and middle power status. This opens the door to more actors—and their competing interests and values—seeking to shape international order. Even with profound uncertainties regarding the future of global economic growth, leading forecasters broadly agree that emerging market economies like China and India will contribute a much larger share of global GDP than is currently the case—shifting the focus of the world’s economic activity eastward.

**Technology and wealth are empowering individuals and small groups to act in ways that states historically monopolized—and fundamentally altering established patterns of governance and conflict.** Just as changes in material wealth challenge the international balance of power, empowered but embattled middle classes in wealthy countries are putting extraordinary pressure on once-established state-society relations, specifically on the roles, responsibilities, and relationships that governments and citizens, elites and masses expect of one another. The reduction of poverty, especially in Asia, has expanded the number of individuals and groups who are no longer focused solely on subsistence but instead wield the power of consumption, savings, and political voice—now amplified by the Internet and modern communications.

- The ICT revolution placed in the hands of individuals and small groups the information and the ability to exert worldwide influence—making their actions, interests, and values more consequential than ever before.

- Nonprofits, multinational corporations, religious groups, and a variety of other organizations now have the ability to amass wealth, influence, and a following—enabling them to address welfare and security in ways that may be more effective than those that political authorities wield.
- Similarly, the increasing accessibility of weapon technologies, combined with effective recruiting and communications, has enabled nonstate groups to upend regional orders.

**The information environment is fragmenting publics and their countless perceived realities—undermining shared understandings of world events that once facilitated international cooperation. It is also prompting some to question democratic ideals like free speech and the “market place of ideas.”** When combined with a growing distrust of formal institutions and the proliferation, polarization, and commercialization of traditional and social media outlets, some academics and political observers describe our current era as one of “post-truth” or “post-factual” politics. Nefarious attempts to manipulate publics are relatively easy in such contexts, as recent Russian efforts vis-à-vis both Ukraine and the US presidential election, including manipulation of alleged Wikileaks disclosures, demonstrate.

- Studies have found that information counter to an individual’s opinion or prior understanding will not change or challenge views but instead will reinforce the belief that the information is from a biased or hostile source, further polarizing groups.
- Compounding matters, people often turn to leaders or others who think like they do and trust them to interpret the “truth.” According to an Edelman Trust Barometer survey, a sizeable trust gap is widening

between college-educated consumers of news and the mass population. The international survey reveals that respondents are increasingly reliant on a “person like yourself,” who is more trusted than a CEO or government official.

- A Pew study from 2014 showed that the highest percentage of trust for a news agency among the US persons polled was only 54 percent. Alternatively, individuals are gravitating to social media to obtain news and information about world and local events.

**The power of individuals and groups to block outcomes will be much easier to wield than the constructive power of forging new policies and alignments or implementing solutions to shared challenges, especially when the credibility of authority and information is in question.**

- For democratic governments, this means greater difficulty in setting and communicating a narrative around the common interest. It also complicates implementing policy.
- For political parties, it heralds a further weakening of their traditional role in aggregating and representing interests to the state. Special interest groups have been rising at the expense of political party membership in the United States since the early 1970s, well before the Internet, but information technology and social networking have reinforced that trend.
- For authoritarian-minded leaders and regimes, the impulse to coerce and manipulate information—as well as the technical means to do so—will increase.

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## The Changing Nature of Power

As global trends converge to make governance and cooperation harder, they are changing the strategic context in ways that make traditional, material forms of power less sufficient for shaping and securing desired outcomes. Material power—typically measured through gross domestic product, military spending, population size, and technology level—has always been, and will continue to be, a prime lever of the state. With such might, powerful states can set agendas and summon cooperation—as with the recent Paris climate accords—and even unilaterally impose outcomes, as Russia’s annexation of Crimea attests. Material power does not explain the impact, however, that nonstate actors, like ISIL, have had in shaping the security environment nor the constraints that major state powers have faced in countering such developments. It also does little to compel those who chose the path of non-compliance.

Securing and sustaining outcomes—whether in combating violent extremism, or managing extreme weather—will get harder because of the proliferation of actors who can veto or deny the ability to take action. Growing numbers of state and nonstate actors are deploying new or nontraditional forms of power, such as cyber, networks, and even manipulating the environment, to influence events and create disruption, placing increased constraints on the ability of “materially powerful” states to achieve outcomes at reasonable costs. States and large organizations now confront the increased possibility that those who disagree—whether activists, citizens, investors, or consumers—will exit, withdraw compliance, or protest, sometimes violently. In addition, expanding global connectivity through information and other networks is enabling weaker but well-connected actors to have an outsized impact.

**The most powerful actors of the future will be states, groups, and individuals who can leverage material capabilities, relationships, and information in a more rapid, integrated, and adaptive mode than in generations past.** They will use material capabilities to create influence and in some instances to secure or deny outcomes. They will demonstrate “power in outcome,” however, by mobilizing large-scale constituencies of support, using information to persuade or manipulate societies and states to their causes. The ability to create evocative narratives and ideologies, generate attention, and cultivate trust and credibility will rest in overlapping but not identical interests and values. The most powerful entities will induce states—as well as corporations, social or religious movements, and some individuals—to create webs of cooperation across issues, while exhibiting depth and balance across their material, relational, and informational capabilities. Sustaining outcomes will require a constant tending to relationships.

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# NEAR FUTURE: TENSIONS ARE RISING





Greek homeless person sleeping outside a bank in 2015; banks were closed at times during the financial crisis to limit withdrawals.

## NEAR FUTURE: TENSIONS ARE RISING

These global trends, challenging governance and changing the nature of power, will drive major consequences over the next five years. They will raise tensions across all regions and types of governments, both within and between countries. These near-term conditions will contribute to the expanding threat from terrorism and leave the future of international order in the balance.

**Within countries, tensions are rising because citizens are raising basic questions about what they can expect from their governments in a constantly changing world.** Publics are pushing governments to provide peace and prosperity more broadly and reliably at home when what happens abroad is increasingly shaping those conditions.

**In turn, these dynamics are increasing tensions between countries—heightening the risk of interstate conflict during the next five years.** A hobbled Europe, uncertainty about

America's role in the world, and weakened norms for conflict-prevention and human rights create openings for China and Russia. The combination will also embolden regional and nonstate aggressors—breathing new life into regional rivalries, such as between Riyadh and Tehran, Islamabad and New Delhi, and on the Korean Peninsula. Governance shortfalls also will drive threat perceptions and insecurity in countries such as Pakistan and North Korea.

- Economic interdependence among major powers remains a check on aggressive behavior but might be insufficient in itself to prevent a future conflict. Major and middle powers alike will search for ways to reduce the types of interdependence that leaves them vulnerable to economic coercion and financial sanctions, potentially providing them more freedom of action to aggressively pursue their interests.

**Meanwhile, the threat from terrorism is likely to expand as the ability of states, groups, and individuals to impose harm diversifies. The net effect of rising tensions within and between countries—and the growing threat from terrorism—will be greater global disorder and considerable questions about the rules, institutions, and distribution of power in the international system.**

**Europe.** Europe's sharpening tensions and doubts about its future cohesion stem from institutions mismatched to its economic and security challenges. EU institutions set monetary policy for Eurozone states, but state capitals retain fiscal and security responsibilities—leaving poorer members saddled with debt and diminished growth prospects and each state determining its own approach to security. Public frustration with immigration, slow growth, and unemployment will fuel nativism and a preference for national solutions to continental problems.

- *Outlook:* Europe is likely to face additional shocks—banks remain unevenly capitalized and regulated, migration within and into Europe will continue, and Brexit will encourage regional and separatist movements in other European countries. Europe's aging population will undermine economic output, shift consumption toward services—like health care—and away from goods and investment. A shortage of younger workers will reduce tax revenues, fueling debates over immigration to bolster the workforce. The EU's future will hinge on its ability to reform its institutions, create jobs and growth, restore trust in elites, and address public concerns that immigration will radically alter national cultures.

**United States.** The next five years will test US resilience. As in Europe, tough economic times have brought out societal and class divisions. Stagnant wages and rising income inequality are fueling doubts about global economic integration and the “American Dream” of upward mobility. The share of American men age 25-54 not seeking work is at the highest level since the Great Depression. Median incomes rose by 5 percent in 2015, however, and there are signs of renewal in some communities where real estate is affordable, returns on foreign and domestic investment are high, leveraging of immigrant talent is the norm, and expectations of federal assistance are low, according to contemporary observers.

- *Outlook:* Despite signs of economic improvement, challenges will be significant, with public trust in leaders and institutions sagging, politics highly polarized, and government revenue constrained by modest growth and rising entitlement outlays. Moreover, advances in robotics and artificial intelligence are likely to further disrupt labor markets. Meanwhile, uncertainty is high around the world regarding Washington's global leadership role. The United States has rebounded from troubled times before, however, such as when the period of angst in the 1970s was followed by a stronger economic recovery and global role in the world. Innovation at the state and local level, flexible financial markets, tolerance for risk-taking, and a demographic profile more balanced than most large countries offer upside potential. Finally, America is distinct because it was founded on an inclusive ideal—the pursuit of life, liberty, and happiness for all, however imperfectly realized—rather than a race or ethnicity. This legacy remains a critical advantage for managing divisions.

**Central and South America.** Although state weakness and drug trafficking have and will continue to beset Central America, South America has been more stable than most regions of the world and has had many democratic advances—including recovery from populist waves from the right and the left. However, government efforts to provide greater economic and social stability are running up against budget and debt constraints. Weakened international demand for commodities has slowed growth. The expectations associated with new entrants to the middle class will strain public coffers, fuel political discontent, and possibly jeopardize the region’s significant progress against poverty and inequality. Activist civil society organizations are likely to fuel social tensions by increasing awareness of elite corruption, inadequate infrastructure, and mismanagement. Some incumbents facing possible rejection by their publics are seeking to protect their power, which could lead to a period of intense political competition and democratic backsliding in some countries. Violence is particularly rampant in northern Central America, as gangs and organized criminal groups have undermined basic governance by regimes that lack capacity to provide many basic public goods and services.

- *Outlook:* Central and South America are likely to see more frequent changes in governments that are mismanaging the economy and beleaguered by widespread corruption. Leftist administrations already have lost power in places like Argentina, Guatemala, and Peru and are on the defensive in Venezuela, although new leaders will not have much time to show they can improve conditions. The success or failure of Mexico’s high-profile reforms might affect the willingness of other countries in the region to take similar political risks. The OECD accession process may be an opportunity—and incentive—

for some countries to improve economic policies in a region with fairly balanced age demographics, significant energy resources, and well-established economic links to Asia, Europe, and the United States.

**An Inward West?** Among the industrial democracies of North America, Europe, Japan, South Korea, and Australia, leaders will search for ways to restore a sense of middle class wellbeing while some attempt to temper populist and nativist impulses. The result could be a more inwardly focused West than we have experienced in decades, which will seek to avoid costly foreign adventures while experimenting with domestic schemes to address fiscal limits, demographic problems, and wealth concentrations. This inward view will be far more pronounced in the European Union, which is absorbed by questions of EU governance and domestic challenges, than elsewhere.

- The European Union’s internal divisions, demographic woes, and moribund economic performance threaten its own status as a global player. For the coming five years at least, the need to restructure European relations in light of the UK’s decision to leave the EU will undermine the region’s international clout and could weaken transatlantic cooperation, while anti-immigration sentiments among the region’s populations will undermine domestic political support for Europe’s political leaders.
- Questions about the United States’ role in the world center on what the country can afford and what its public will support in backing allies, managing conflict, and overcoming its own divisions. Foreign publics and governments will be watching Washington for signs of compromise and cooperation, focusing especially on global trade, tax reform, workforce preparedness

for advanced technologies, race relations, and its openness to experimentation at the state and local levels. Lack of domestic progress would signal a shift toward retrenchment, a weaker middle class, and potentially further global drift into disorder and regional spheres of influence. Yet, America's capital, both human and security, is immense. Much of the world's best talent seeks to live and work in the United States, and domestic and global hope for a competent and constructive foreign policy remain high.

**China.** China faces a daunting test—with its political stability in the balance. After three decades of historic economic growth and social change, Beijing, amid slower growth and the aftereffects of a debt binge, is transitioning from an investment-driven, export-based economy to one fueled by domestic consumption. Satisfying the demands of its new middle classes for clean air, affordable houses, improved services, and continued opportunities will be essential for the government to maintain legitimacy and political order. President Xi's consolidation of power could threaten an established system of stable succession, while Chinese nationalism—a force Beijing occasionally encourages for support when facing foreign friction—may prove hard to control.

- *Outlook:* Beijing probably has ample resources to prop up growth while efforts to spur private consumption take hold. Nonetheless, the more it “doubles down” on state owned enterprises (SOEs) in the economy, the more it will be at greater risk of financial shocks that cast doubt on its ability to manage the economy. Automation and competition from low-cost producers elsewhere in Asia and even Africa will put pressure on wages for unskilled workers. The country's rapidly

shrinking working-age population will act as a strong headwind to growth.

**Russia.** Russia's aspires to restore its great power status through nationalism, military modernization, nuclear saber rattling, and foreign engagements abroad. Yet, at home, it faces increasing constraints as its stagnant economy heads into a third consecutive year of recession. Moscow prizes stability and order, offering Russians security at the expense of personal freedoms and pluralism. Moscow's ability to retain a role on the global stage—even through disruption—has also become a source of regime power and popularity at home. Russian nationalism features strongly in this story, with

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Imagining a surprise  
news headline in 2021 . . .

## **“Gig Workers” Riot in London and New York**

**September 17, 2021 – London**

The Gig Workers Movement (GWM), representing the growing number of independent, temporary workers, organized violent protests and denial of service cyberattacks on major companies in London and New York to protest poor pay, job uncertainty, and a lack of benefits. Movement leaders warned they would stage more disruptive protests unless they received stronger social support for basic food and housing supplemental programs. The cyber-attacks leveraged millions of compromised Internet-connected devices and overwhelmed the targeted companies' information systems.

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China's dramatic economic growth has highlighted greater gaps between rich and poor.

President Putin praising Russian culture as the last bulwark of conservative Christian values against the decadence of Europe and the tide of multiculturalism. Putin is personally popular, but approval ratings of 35 percent for the ruling party reflect public impatience with deteriorating quality of life conditions and abuse of power.

- *Outlook:* If the Kremlin's tactics falter, Russia will become vulnerable to domestic instability driven by dissatisfied elites—even as a decline in status suggests more aggressive international action. Russia's demographic picture has improved somewhat since the 1990s but remains bleak. Life expectancy among males is the lowest of the industrial world, and its population will continue to decline. The longer Moscow delays diversifying its economy, the more the government will stoke nationalism and sacrifice personal freedoms and pluralism to maintain control.

#### ***An Increasingly Assertive China and Russia.***

Beijing and Moscow will seek to lock in temporary competitive advantages and to right what they charge are historical wrongs before economic and demographic headwinds further slow their material progress and the West regains its footing. Both China and Russia maintain worldviews in which they are rightfully dominant in their regions and able to shape regional politics and economics to suit their security and material interests. Both have moved aggressively in recent years to exert greater influence in their regions, to contest the US geopolitically, and to force Washington to accept exclusionary regional spheres of influence—a situation that the United States has historically opposed. For example, China views the continuing presence of the US Navy in the Western Pacific, the centrality of US alliances in the region, and US protection of Taiwan as outdated and representative of the continuation of China's "100 years of humiliation."

- Recent Sino-Russian cooperation has been tactical, however, and is likely to return to competition if Beijing jeopardizes

Russian interests in Central Asia and as Beijing enjoys more options for cheap energy supply beyond Russia. Moreover, it is not clear whether there is a mutually acceptable border between what China and Russia consider their natural spheres of influence. Meanwhile, India's growing economic power and profile in the region will further complicate these calculations, as New Delhi navigates relations with Beijing, Moscow, and Washington to protect its own expanding interests.

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Imagining a surprise  
news headline in 2019 . . .

## China Buys Uninhabited Fijian Island To Build Military Base

**February 3, 2019 – Beijing**

A Chinese development firm—with links to the Chinese Government and People's Liberation Army—today announced that it recently purchased the uninhabited Cobia Island from the Government of Fiji for \$850 million. Western security analysts assess that China plans to use the island to build a permanent military base in the South Pacific, 3,150 miles southwest of Hawaii.

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Russian assertiveness will harden anti-Russian views in the Baltics and other parts of Europe, escalating the risk of conflict. Russia will seek, and sometimes feign, international cooperation, while openly challenging norms and rules it perceives as counter to its interests and providing support for leaders of fellow “managed democracies” that encourage resistance to American policies and preferences. Moscow has

little stake in the rules of the global economy and can be counted on to take actions that weaken US and European institutional advantages. Moscow will test NATO and European resolve, seeking to undermine Western credibility; it will try to exploit splits between Europe's north and south and east and west, and to drive a wedge between the United States and the EU.

- Similarly, Moscow will become more active in the Middle East and those parts of the world in which it believes it can check US influence. Finally, Russia will remain committed to nuclear weapons as a deterrent and as a counter to stronger conventional military forces, as well as its ticket to superpower status. Russian military doctrine purportedly includes the limited use of nuclear weapons in a situation where Russia's vital interests are at stake to “deescalate” a conflict by demonstrating that continued conventional conflict risks escalating the crisis to a large-scale nuclear exchange.

In **Northeast Asia**, growing tensions around the Korean Peninsula are likely, with the possibility of serious confrontation in the coming years. Kim Jong Un is consolidating his grip on power through a combination of patronage and terror and is doubling down on his nuclear and missile programs, developing long-range missiles that may soon threaten the continental United States. Beijing, Seoul, Tokyo, and Washington have a common incentive to manage security risks in Northeast Asia, but a history of warfare and occupation along with current mutual distrust makes cooperation difficult. Continued North Korean provocations, including additional nuclear and missile tests, might worsen stability in the region and prompt neighboring countries to take actions, sometimes unilaterally, to protect their security interests.

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## Competing Views on Instability

China and Russia portray global disorder as resulting from a Western plot to push what they see as self-serving American concepts and values of freedom to every corner of the planet. Western governments see instability as an underlying condition worsened by the end of the Cold War and incomplete political and economic development. Concerns over weak and fragile states rose more than a generation ago because of beliefs about the externalities they produce—whether disease, refugees, or terrorists in some instances. The growing interconnectedness of the planet, however, makes isolation from the global periphery an illusion, and the rise of human rights norms makes state violence against a governed population an unacceptable option.

One consequence of post-Cold War disengagement by the United States and the then-USSR, was a loss of external support for strongmen politics, militaries, and security forces who are no longer able to bargain for patronage. Also working against coercive governments are increased demands for responsive and participatory governance by citizens no longer poor due to the unprecedented scale and speed of economic development in the nonindustrial world. Where political and economic development occurred roughly in tandem or quick succession, modernization and individual empowerment have reinforced political stability. Where economic development outpaced or occurred without political changes—such as in much of the Arab world and the rest of Africa and South Asia—instability ensued. China has been a notable exception. The provision of public goods there so far has bolstered political order but a campaign against corruption is now generating increasing uncertainty and popular protests have grown during the past 15 years. Russia is the other major exception—economic growth—largely the result of high energy and commodity prices—helped solve the disorder of the Yeltsin years.

US experience in Iraq and Afghanistan has shown that coercion and infusions of money cannot overcome state weakness. Rather, building a stable political order requires inclusiveness, cooperation among elites, and a state administration that can both control the military and provide public services. This has proved more difficult than expected to provide.

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North Korean military parade, 2013.

- Kim is determined to secure international recognition of the North as a nuclear-armed state, for the purposes of security, prestige, and political legitimacy. Unlike his father and grandfather, he has signaled little interest in participating in talks on denuclearization. He codified the North's nuclear status in the party constitution in 2012 and reaffirmed it during the Party Congress in 2016.
- Beijing faces a continuing strategic conundrum about the North. Pyongyang's behavior both undermines China's claim that the US military presence in the region is anachronistic and demonstrates Beijing's lack of influence—or perhaps lack of political will to exert influence—over its neighbor and client. North Korean behavior leads to tightening US alliances, more assertive behavior by US allies, and, on occasion, greater cooperation between those allies themselves—and may lead to a shift in Beijing's approach to North Korea over time.
- The decisions before Seoul and Tokyo are significant as well, with both focused intently on maintaining the US security umbrella while improving their own security capabilities.

**Middle East and North Africa.** Virtually all of the region's trends are going in the wrong direction. Continuing conflict and absence of political and economic reform threatens poverty reduction, the region's one recent bright spot. Resource dependence and foreign assistance has propped up elites even as it fostered popular dependence on the state by inhibiting markets, employment, and human capital. With oil prices unlikely to recover to levels of the oil boom, most governments will have to limit cash payments and subsidies. Meanwhile, social media has provided new tools for publics to vent frustration. Conservative religious groups—including Muslim Brotherhood affiliates and Shia movements—and ethnically-based organizations like those centered on Kurdish identity are poised to be primary alternatives to ineffective governments in the region. Such groups typically



provide social services better than the state and their politics resonate with publics who are generally more conservative and religious than the region's political and economic elites.

- *Outlook:* Left unchecked, current trends will further fragment the region. The influence of extremist Islamist groups is likely to expand, reducing the tolerance for and presence of minorities, setting the stage for additional migration flows. Risks of instability in Arab states such as Egypt, and possibly Saudi Arabia, could tempt rulers to impose control through force—an impulse at odds with countertrends like technology's empowerment of individuals, freer information flows, and poverty reduction. Alternatively, transition to democracy could provide an attractive model, if it delivers greater stability and inclusive prosperity. Progress on poverty reduction, education, and women's empowerment in some parts of the region provides momentum for tapping into the growing number of young people that will be coming of working age.

Geopolitically, growing humanitarian crises and regional conflict in the Middle East and North Africa will threaten to further undermine the credibility of international dispute resolution and human rights norms. Perceptions in the region's capitals that Washington is unreliable have invited competition from Russia, and possibly China, and hedging by Arab states regarding US commitments. These perceptions stem from unenforced redlines in Syria, withheld support for Mubarak and other Arab incumbents in 2011, an alleged tilt toward Iran and away from traditional Sunni allies and Israel, and a sense of neglect because of the US rebalance to Asia.

- Meanwhile, Iran, Israel, and perhaps Turkey are likely to grow in power and influence relative to other states in the region but will remain at odds with each other. Iran's

growing power, nuclear capabilities and aggressive behavior will continue to be a concern for Israel and Gulf Arab states. The sectarian nature of Iranian and Saudi regional competition, which promotes inflammatory rhetoric and allegations of heresy throughout the region, heightens these concerns.

**Sub-Saharan Africa.** Democratic practices have expanded, civil society groups have proliferated, and public demand for better governance has become more urgent. Still, many African states continue to struggle with “big man” rule, patronage politics, and ethnic favoritism. Many leaders remain focused on political survival rather than reform—with some defying term limits. Global economic headwinds also threaten progress by keeping commodity prices low and foreign investment weak. Even some countries that have made progress toward democracy remain fragile and prone to violence accompanying elections. Tensions between Christian and Muslim groups could escalate into conflict.

- *Outlook:* During the next five years, growing African populations will become more youthful, urban, mobile, and networked, and better educated—and more demanding of a voice. Rapid urbanization will stress infrastructure and increase visibility of elite corruption—fueling public frustration with services or opportunities. Some 75 to 250 million Africans will experience severe water stress, likely leading to mass migration. Nonetheless, Africa will remain a zone of experimentation by governments, corporations, NGOs and individuals seeking to advance development. The progress of the past two decades—including an expanded middle class, increasingly vibrant civil society, and the spread of democratic institutions—suggests upside potential.

**South Asia.** India will be the world's fastest growing economy during the next five years as China's economy cools and growth elsewhere sputters, but internal tensions over inequality and religion will complicate its expansion. New Delhi, however, will continue to offer smaller South Asian countries a stake in India's economic growth through development assistance and increased connectivity to India's economy, contributing to India's broader effort to assert its role as the predominant regional power. Violent extremism, terrorism, and instability will continue to hang over Afghanistan, Pakistan, and the region's fragile communal relations. The threat of terrorism, from Lashkar-e-Tayyiba (LET), Tehrik-i-Taliban Pakistan (TTP), and al-Qa'ida and its affiliates—as well as ISIL's expansion and sympathy for associated ideology—will remain prominent in the region. Competition for jobs, coupled with discrimination against minorities, may contribute to radicalization of the region's youth, especially given abnormal sex ratios favoring males in several countries.

- *Outlook:* The quality of India's development will depend on addressing widespread poor public health, sanitation, and infrastructure conditions. The rate of malnourished children, for example, is higher in India than in Sub-Saharan Africa. Populism and sectarianism will intensify if Bangladesh, India, and Pakistan fail to provide employment and education for growing urban populations and officials continue to govern principally through identity politics. Human health, food security, infrastructure, and livelihoods will deteriorate from pollution, earthquakes and the effects of climate change, including shifting monsoon patterns and increasing glacier melt. South Asia's openness to the private sector, community groups, and NGOs, however, should position it well for an era of empowered individuals, especially if governments curb their support for chauvinistic groups that divide societies.

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Imagining a surprise  
news headline in 2032 . . .

## **IMF Says African Economic Growth Rate Surpasses Asia**

**February 11, 2032 – Washington, DC**

The International Monetary Fund (IMF) said Africa's economic growth rate last year topped 5 percent, surpassing Asia for the first time as numerous improvements converged to spur regional development. The availability of cheaper solar power panels and home batteries have revolutionized energy in the region over the last decade; advances in GMOs and desalination technology stabilized food production; growing financial services, digital payments, and peer-to-peer social funding boosted commerce; and widespread use of 3D printing increased local manufacturing that harnessed Africa's growing workforce.

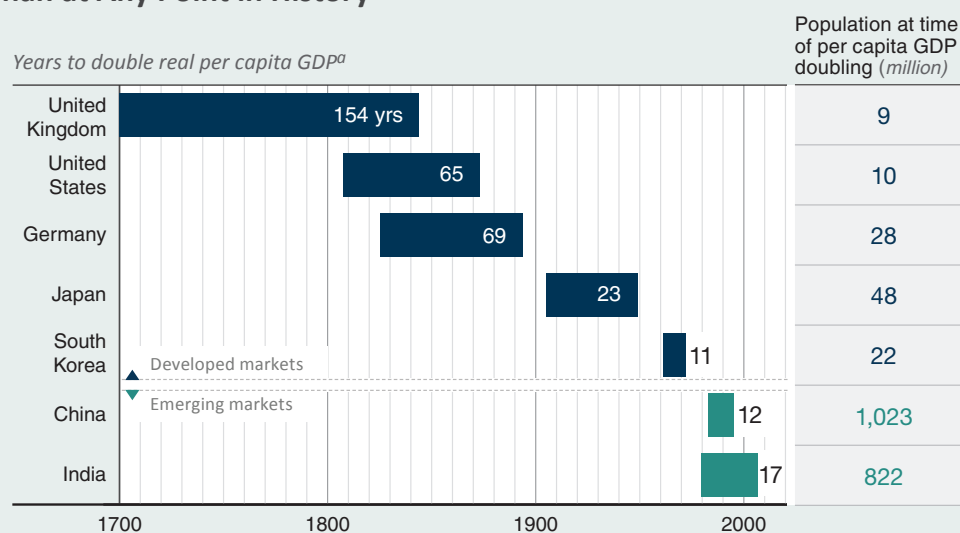
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In **South Asia**, Pakistan will feel compelled to address India's economic and conventional military capabilities through asymmetric means. Pakistan will seek to enhance its nuclear deterrent against India by expanding its nuclear arsenal and delivery means, including pursuing "battlefield nuclear weapons" and sea-based options. India, by contrast, will focus its attention on both Islamabad and Beijing—seeking military partnerships with Europe, Japan, the United States, and others—to boost its conventional capabilities while striving for escalation dominance vis-a-vis Pakistan.

- At-sea deployments of nuclear weapons by India, Pakistan, and perhaps China, would increasingly nuclearize the Indian Ocean

## In Emerging Economies, Incomes Are Rising Faster, and at a Greater Scale, Than at Any Point in History

India and China doubled per capita income much faster than much smaller emerging economies in the past.



during the next two decades. The presence of multiple nuclear powers with uncertain doctrine for managing at sea incidents between nuclear-armed vessels increases the risk of miscalculation and inadvertent escalation. Nuclear mating requirements for naval-based delivery vehicles remove a safety valve that until now has kept nuclear weapons stored separately from missiles in South Asia.

### Growing Terrorism Threat

**The terrorism threat is likely to increase as the means and the motivations of states, groups, and individuals to impose harm diversify.**

Prolonged conflicts and the information age allow terrorists to recruit and operate on a large scale, demonstrating the evolving nature of the threat. Terrorism kills fewer people globally than crime or disease, but the potential for new

capabilities reaching the hands of individuals bent on apocalyptic destruction is all too real. This ultimate low-probability, high-impact event underscores the imperative of international cooperation and state attention to the issue.

Terrorists will continue to justify their violence by their own interpretations of religion, but several underlying drivers are also in play. Within countries, the breakdown of state structures in much of the Middle East continues to create space for extremists. The ongoing proxy war between Iran and Saudi Arabia also is fueling Shia-Sunni sectarianism—with some militant groups further fracturing over religious differences. In addition, perceptions of “Western hegemony,” remains a potent rallying cry for some groups, mobilized around striking the “far enemy.”

- Although the location of religiously driven terrorism will fluctuate, the rise of violent religious nationalism and the

schism between Shia and Sunni are likely to worsen in the short term and may not abate by 2035. The combination of powerful ideologies like Salafi-jihadism, whether ISIL's or al-Qa'ida's, in a region undergoing vast and rapid political change against the backdrop of generations of autocratic government and economic disparities creates the nexus in which violence becomes more likely. Militant Christianity and Islam in central Africa, militant Buddhism in Burma, and violent Hindutva in India will all continue to fuel terror and conflict.

- Extremists will exploit anger and link perceived injustices with the common identity of deepening religious affiliation in some parts of the world. Religion will become a more important source of meaning and continuity because of increasing information connectedness, the extent of state weakness in much of the developing world, and the rise of alienation due to the dislocation from traditional work in the developed world. Rapid change and conditions of political and economic uncertainty, if not insecurity, will encourage many people to embrace ideologies and identities for meaning and continuity.
- Advances in information technologies—whether with the printing press and Gutenberg Bible in the 15<sup>th</sup> century or with the invention of the World Wide Web in 1989—allow religious content to spread widely, in part because religions are ideas that transcend borders and are often more influential in daily lives than state authority. The vast majority of believers will be peaceful, but those with extreme views will find likeminded followers and vulnerable recruits through information technologies. Most world religions—including Christianity, Islam, and

Judaism, Buddhism, and Hinduism—have exclusionary aspects of doctrine that can be exploited in this way.

Beyond religion, psychological and social factors will drive individual participation in terrorism, as well as help terrorist groups attract recruits and resources and maintain cohesion.

- *Some level of alienation*, whether being disconnected from the sociocultural mainstream, unable to participate in the political process, or lacking economic benefits from society.
- *Ethnic and kinship bonds*—peer, social or familial networks—as well as a desire for adventure, fame, and belonging.
- *“Denationalizing,”* that is, the loss of connection with their community of origin, of young immigrants in European cities, combined with lack of opportunity or effective incentive to take on a new European identity.
- *Ethnic and religious tensions* (beyond today's hotspots), as between Malays and Thais in Thailand, Muslims and Buddhists in Burma, and Christians and Muslims in Nigeria.

**Technology will be a double-edged sword.**

**On the one hand, it will facilitate terrorist communications, recruitment, logistics, and lethality. On the other, it will provide authorities with more sophisticated techniques to identify and characterize threats—if their publics allow them.** Technology will continue to enable nonstate actors to mask their activity and identity. The use of cyber tools to take down electrical systems, for instance, has potential mass disruption effects, some with lethal consequences. Communications technology also will be key to nonstate actors' ability to recruit new members, finance operations,





Frederic Legrand - COMEO / Shutterstock.com

A man lights a candle in front of the restaurant “Le Carillon” in tribute to victims of the Nov. 13, 2015 terrorist attack in Paris at the Bataclan.

and disseminate messages. Advancements in technology will also lower technological barriers to high-impact, low-likelihood terrorist WMD scenarios, and enable the proliferation of lethal, conventional weaponry to terrorist groups.

- Technology will further decentralize the threat—from an organized and controlled al-Qa’ida to a fragmented jihadist militancy, for example. This trend will pose challenges to counterterrorism efforts and change the nature of future terrorist plots and strategies.

### Future International Order in the Balance

The post-World War II international order that enabled today’s political, economic, and security structures and institutions is in question as power diffuses globally, shuffling seats at the “table” of international decision making. Today, aspiring powers seek to adjust the rules of the game and international context in ways favorable to their

Imagining a surprise  
news headline in 2019 . . .

### Mexico Outlaws Private Drones After Latest Assassination Attempt

May 13, 2019 – Mexico City

The Mexican Government today announced it was a crime for private citizens to own drones after the fifth “drone-bomb” assassination attempt by drug cartels against senior government officials in less than three months, the latest targeting the new Minister of Interior.

interests. This dynamic complicates reform of international institutions such as the UN Security Council or the Bretton-Woods institutions, and brings into question whether civil, political, and human rights—hallmarks of liberal values and US leadership since 1945—will continue to be

so. Norms that were thought to be settled will be increasingly threatened if current trends hold, and consensus to build new norms may be elusive—particularly as Russia, China, and other actors such as ISIL seek to shape regions and international norms in their favor. A few features of the evolving international order are clear:

- Geopolitical competition is on the rise as China and Russia seek to exert more sway over their neighboring regions and promote an order in which US influence does not dominate.
- Although states and organizations will continue to shape citizen expectations about the future order, citizen and subnational concerns will increasingly press states to the point that international and domestic politics will not be separable.
- This will result in the near term in waning commitments to existing security concepts and human rights among some states, even as some individuals and small groups advocate for such ideas through new and legacy platforms, venues, and institutions.
- Authoritarian regimes are likely to increasingly reinterpret and manipulate human rights norms. This will probably lead to decreasing consensus in the international arena on the extraterritorial obligations of states, such as when to apply concepts such as the Responsibility to Protect— which could have negative consequences for domestic civil societies and the resolution of humanitarian conflicts.
- The norms and practices emerging around climate change—and their influence on international and state development policies—are the most likely candidates for fostering a 21<sup>st</sup> century set of common principles. Majorities in 40 countries polled

by Pew say climate change is a serious problem, with a median of 54 percent globally saying it is a very serious problem.

The near-term likelihood of international competition leading to greater global disorder and uncertainty will remain elevated as long as a la carte internationalism persists. As dominant states limit cooperation to a subset of global issues while aggressively asserting their interests in regional matters, international norms and institutions are likely to erode and the international system to fragment toward contested regional spheres of influence.

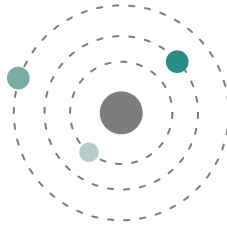


# THREE SCENARIOS FOR THE DISTANT FUTURE

## ISLANDS



## ORBITS



## COMMUNITIES



# THREE SCENARIOS FOR THE DISTANT FUTURE: ISLANDS, ORBITS, AND COMMUNITIES

Thinking about the future beyond the next five years involves so many contingencies that it is helpful to consider how selected trends, choices, and uncertainties might play out over multiple pathways—as told through a set of short stories, commonly known as scenarios. While no single scenario can describe the entirety of future global developments, scenarios can portray how the foremost issues and trends might characterize the future, much like the terms “Cold War” and “Gilded Age” defined the dominant themes of past eras. For us, the three primary uncertainties shaping the next 20 years revolve around:

(1) **Dynamics within countries.** How governments and publics renegotiate their expectations of one another and create political order in an era of heightened change, marked by empowered individuals and a rapidly changing economy;

(2) **Dynamics between countries.** How the major powers, along with select groups and individuals, work out patterns of competition and cooperation; and

(3) **Long-term, short-term tradeoffs.** To what extent will states and other actors prepare in the near-term for complex global issues like climate change and transformative technologies.



**The three scenarios—“Islands,” “Orbits,” and “Communities”—explore how critical trends and choices might intersect to create different paths to the future. These scenarios postulate alternative responses to near-term volatility—at the national (Islands), regional (Orbits), and substate and transnational (Communities) levels.** The scenarios also consider alternative US responses to these trends—for instance, ranking US domestic and economic issues over foreign relations, engaging globally to defend US interests overseas, or adjusting governing practices to take advantage of the proliferation of influential actors. While no single outcome is preordained, the following scenarios characterize the types of issues that will confront policymakers in the years ahead.



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## Methodology of Scenario Analysis

Good scenarios are far more art than science. The stories need to be grounded enough to feel plausible, while imaginative enough to challenge our assumptions—because the world regularly twists and turns in surprising ways. None of these outcomes, however, are predetermined. The choices people make—individually and collectively, whether by intent or chance—will remain the biggest variables driving the course of events. Many more scenarios could have been generated from the trends we discuss in this report, but we hope the scenarios we have crafted stimulate thinking and discussion about the future.

- Thinking creatively about the future is often difficult because of the tendency for the recent past and current events to prejudice assessments. Developing alternative scenarios helps to challenge unstated assumptions about the future, revealing new possibilities and choices that are otherwise difficult to discern.
- Our scenarios, and the challenges and opportunities they represent, are not necessarily mutually exclusive. The future will probably include elements from each, but at different levels of intensity or in different regions of the world. For example, the future described in the “Islands” scenario might prompt some states to react to increasing economic instability and the inward focus of the West by taking actions to secure their own interests, moving the future in the direction of our “Orbits” scenario. Alternatively, the inability of national governments to effectively manage economic and technological changes might generate a greater role for local governments and private actors, creating the conditions for the “Communities” scenario to emerge.
- We encourage readers to use these scenarios to challenge their current planning assumptions and to begin a strategic conversation about preparing for the challenges and opportunities that might lie ahead. The scenarios should be reevaluated as new developments emerge.



**This scenario investigates the issues surrounding a restructuring of the global economy that leads to long periods of slow or no growth, challenging the assumption that traditional models of economic prosperity and expanding globalization will continue in the future. The scenario emphasizes the difficulties for governance in meeting future societal demands for economic and physical security as popular pushback to globalization increases, emerging technologies transform work and trade, and political instability grows. This scenario underscores the choices governments will face in adjusting to changing economic and technological conditions that might lead some to turn inward, reduce support for multilateral cooperation, and adopt protectionist policies and others to find ways to leverage new sources of economic growth and productivity. Here is an economist reflecting on the 20 years since the 2008 global financial crisis:**

The past 20 years of coping with downsides of globalization, financial volatility, and increasing inequality has transformed the global environment. Mounting public debt, aging populations, and decreased capital investment exacerbated downward pressures on developed

economies. Public and business demands for protection from market swings, disruptive technologies, disease outbreaks, and terrorism drove many countries to turn inward. Political instability increased as public frustration rose in countries that failed to manage change. Many governments struggled to maintain services to their populace, as tax revenues failed to keep pace with growing obligations. The segments of populations that had obtained “middle class” status prior to the financial crisis were most at risk and many fell back into moderate levels of poverty. Globalization slowed as governments adopted protectionist policies in response to domestic pressures. Most economists identify the following developments as key factors slowing global economic growth and accelerating the reversal of much of the globalization trends of the previous decades:

- **The rise of inequality as wealth** became more concentrated fed tensions within societies and led to popular pushback against globalization.
- **The spread of artificial intelligence** and automation technologies disrupted more industries than economists expected.

This trend sparked a backlash from large numbers of displaced workers, creating a political constituency that forced some governments to stop participating in global trade institutions and agreements they had previously committed to support.

- **Trade patterns shifted** as governments favored employing regional trading blocs and bilateral trade agreements over comprehensive global arrangements. The wide adoption of new technologies, such as additive manufacturing (3-D printing), often provided local producers a competitive advantage vis-à-vis foreign suppliers reducing global trade in manufactured goods.
- **Slower global economic growth** depressed energy prices and placed additional pressures on the energy-dependent economies of Russia, the Middle East and South America while also increasing competition among energy producers.
- **China and India remained stuck in the “middle income trap,”** suffering stagnant economic growth, wages, and living standards, because they were unable to generate sufficient domestic demand to drive higher economic growth when foreign trade flagged.
- **Domestic and economic challenges drove the United States and Europe to focus inward.** The United States and the EU adopted protectionist policies to preserve domestic industries. European economies suffered because of declining exports and underdeveloped service industries. Germany and France found enough common ground to hold together the Euro Zone; however, renewed fiscal stimulus did little to reinvigorate economic growth in the periphery states of Europe,

and insufficient willingness to ease labor restrictions undermined EU member states’ ability to maintain or boost their international competitiveness.

- **Rising intellectual property theft and cyber attacks** drove some governments to introduce stringent controls that hampered information sharing and cooperation across the Internet.
- **Changing climate conditions** challenged the capacity of many governments to cope, especially in the Middle East and Africa, where extended droughts reduced food and water supplies and high temperatures suppressed the ability of people to work outdoors. Large numbers of displaced persons from the region often found they had no place to go as a series of dramatic terrorist attacks in Western countries drove those governments to adopt stringent security policies that restricted immigration.
- **The global pandemic of 2023** dramatically reduced global travel in an effort to contain the spread of the disease, contributing to the slowing of global trade and decreased productivity.

The combination of these events led to a more defensive, segmented world as anxious states sought to metaphorically and physically “wall” themselves off from external challenges, becoming “islands” in a sea of volatility. International cooperation on global issues, such as terrorism, failing states, migration, and climate change eroded, forcing more isolated countries to fend for themselves. Furthermore, declining defense budgets and preoccupying domestic concerns drove the West to spurn military force when its vital interests were not threatened. This led to an atrophying US alliance system. Instability increased in parts of Africa, the Middle East, and South Asia.

Economic challenges still exist 20 years after the 2008 financial crisis, but several developments indicate we are now entering a new era of economic growth and prosperity. Technology advances, such as, artificial intelligence, machine learning, additive manufacturing, and automation—although disruptive to traditional job markets—have the potential to boost economic efficiency and productivity, leading to new areas of activity and economic growth for a broad range of countries. The realization that the most creative and innovative solutions are often achieved through man-machine cooperation rather than through machines alone is helping to reverse earlier job losses, although providing opportunities for individual displaced workers through training has not been universally successful.

Furthermore, the slowing of globalization and trade is sparking a new generation of experimentation, innovation, and entrepreneurship at local levels. The increasing costs of food imports as countries have imposed carbon taxes have also spurred local agriculture production. These developments are most prominent in societies that provide access to online education resources as well as scientific and technical knowledge that is shared among communities of like-minded entrepreneurs and hobby-technologists. Some governments, however, are ill prepared to handle the security aspects raised by the proliferation of new technologies, which also has resulted in the rise of tech-enabled criminal gangs and terrorist groups and new methods for circumventing government controls.

Developments in biotechnologies and health care also are leading to new industries and improved productivity, as greater access to care is creating healthier workforces. Expanding working-age populations through better health care has the potential to provide an economic boost to countries with aging populations. A

proliferation of robotics and artificial intelligence in basic medicine and diagnostics is also helping to make affordable care more widely available and has reduced the cost burden of caring for aging citizens on cash-strapped governments.

Improving economic growth will continue to depend on new technologies, local innovation and entrepreneurship. There remains an acute need for government programs to cushion future economic disruptions and ensure the welfare of those in society who are least able to adapt. Addressing these issues, however, requires overcoming the political polarization that has prevented many governments from achieving the necessary budget compromises. Continued government support for these endeavors through the reinvigorated trading of technologies, expertise, and resources also might help bridge the economic gaps that exist within and between countries.

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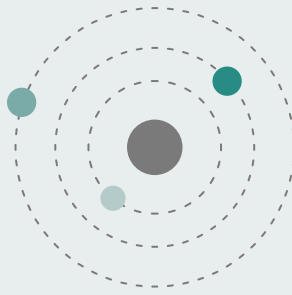
## Islands Implications

This scenario explores the ramifications if governments fail to manage the changes in global economic conditions that have led to increasing inequality, lower growth rates in developed economies, job displacements, and societal divisions. The scenario highlights the need for the rich countries to address the negative byproducts of past economic policies and to manage the tensions between populism and inclusion. The most successful states will be those with governments that encourage research and innovation; promote information sharing; maintain high-quality education and lifelong learning in science, technology, engineering and mathematics; provide job retraining; and adopt tax, immigration, and security policies to attract and retain high-tech talent. Such developments would encourage greater experimentation, innovation, and entrepreneurship to help boost domestic manufacturing and create employment.

Alternatively, states that choose to place controls on access to information, fail to honor intellectual property rights, and discourage the import of high-tech talent will likely be excluded from the economic benefits offered by emerging technology advances. Security will be another key issue as these developments also create challenges in the forms of technology-enabled terrorist attacks and criminal activity.

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## ORBITS

**This scenario explores a future of tensions created by competing major powers seeking their own spheres of influence while attempting to maintain stability at home. It examines how the trends of rising nationalism, changing conflict patterns, emerging disruptive technologies, and decreasing global cooperation might converge to increase the risk of interstate conflict. This scenario emphasizes policy choices that would reinforce stability and peace or exacerbate tensions. These choices are explored through the memoirs of a National Security Advisor reflecting on his assessment of the international environment near the end of President Smith's second term in office in 2032:**

Over the course of the Smith presidency, I witnessed a number of developments giving me hope that the next President will find the world in a much better place. It was not that long ago, however, that increasing geopolitical tensions led to the brink of interstate conflict.

It was the combination of competing values among rival states, military build-ups, rising nationalism, and domestic insecurity that created an era of increased geopolitical competition among the major powers. In the early 2020s, polarizing politics and fiscal burdens constrained

US engagement on the world stage, prompting foreign assessments that the United States was moving toward a prolonged period of retrenchment. China and Russia, in particular, viewed this time as an opportunity to seek greater influence over neighboring countries within their respective regional economic, political and security orbits. Iran also attempted to take advantage of instability in the Middle East to expand its influence in the region.

By the mid-2020s, these developments led to the international system devolving toward contested regional spheres. The powers at the center of the spheres attempted to assert their right to privileged economic, political, and security influence within their regions. China increasingly used its economic and military power to influence the behavior of neighboring states and to force concessions from foreign business seeking access to its markets. India, Japan, and other states adopted more assertive independent foreign policies to counter Chinese encroachment on their interests, increasing regional tensions in East and South Asia. Russia also asserted itself more forcefully in Central Asia to keep that region under Moscow's influence and to counter China's growing presence.

Regional tensions increased as China undertook extensive engineering projects to change local environmental conditions, such as diverting major rivers to the detriment of neighboring states. As environmental conditions in China continued to degrade, Beijing considered more ambitious geoengineering projects, such as injecting tons of sulfate aerosols into the atmosphere to lower temperatures. These efforts ignited an international debate over the ethics of a single state taking action that affected the global ecosystem, prompting some countries to threaten China with punitive actions if Beijing unilaterally pursued climate modification.

When President Smith came to power eight years ago, there was a general consensus among national security experts that while geopolitical competition was intensifying, both economic and political interests would stop states from direct military conflict. This seemed to be the case as China, Iran, and Russia separately eschewed direct military conflict in favor of lower levels of competition—diplomatic and economic coercion, propaganda, cyber intrusions, proxies, and indirect applications of military power—blurring the distinction between peace and war. The most frequent victim was “the truth” as propaganda from these states—distributed through a variety of social, commercial, and official outlets—distorted, misrepresented, and shaped information about what was really happening. The culmination of these actions, however, undermined international norms about sovereignty and peaceful resolutions of disputes and perpetuated perceptions of US disengagement.

The President decided early in his first term that the United States could no longer stand by and allow these developments to continue unabated. He moved to shore up US alliances and increasingly employed US military forces in exercising international norms such as freedom of navigation operations. Efforts, however, by

China, Iran, and Russia to prepare for traditional military conflicts—by deploying greater numbers of advanced weapons such as long-range, precision-guided, strike systems to threaten rival military forces operating in their regional sphere—intensified global perceptions of increasing security competition between these countries and the United States and its allies. We did not fully realize at the time, however, that Beijing, Moscow, and Tehran were increasingly nervous about their standing at home due to economic stress and social tensions, leading them to believe they could not compromise on external challenges to their interests for fear of appearing weak. The collision between a Chinese underwater autonomous vehicle and a Japanese Coast Guard ship patrolling off the Senkaku islands, the cyber attacks against European financial centers attributed to Russian hackers, and the Iranian threat to employ its increasingly accurate ballistic missiles to strike Saudi energy and desalination facilities were a few of the flashpoints that narrowly missed escalating into broader conflict.

It took a mushroom cloud in a desert in South Asia to shake us from our complacency. I remember how the crisis between India and Pakistan started: the Second Indus Waters Treaty was abandoned by both sides, followed shortly by a series of explosions in New Delhi that the Indian Government quickly attributed to Pakistan-based extremist groups. Islamabad denied involvement, but both sides began mobilizing their military forces. After a few confusing days of cyber attacks that disrupted the ability of both sides to understand what was happening, the situation escalated quickly. According to a subsequent investigation, artificial intelligence systems supporting the military decision makers made the crisis worse by misinterpreting signals meant to deter instead as signs of aggressive intent. The result was the first use of a nuclear weapon in a conflict since 1945.

With China's help, the United States quickly moved to defuse the crisis—we were lucky. The conflict barely missed escalating to a full nuclear exchange. President Smith shared the Nobel Peace Prize with the President of China that year. More importantly, however, the Indo-Pakistani war of 2028 reminded all the major powers of the dangerous game we were playing. A series of confidence-building measures and arms control agreements with China and Russia followed, placing limits on the most unstable escalatory weapon capabilities. Putin's successor also made great strides in repairing Russia's relations with Europe to the benefit of the Russian economy. These experiences allowed the United States and the other major powers to build a foundation of trust that enabled cooperation on other security issues, such as instability in North Korea and the Middle East.

The next US President will have to deal with a world where geopolitical competition still exists, but where the major powers learned, for self-preservation, to cooperate with each other in areas of mutual interest. If not for the shock we all felt by the close call in South Asia, the choices President Smith and others might have made could have led to a very different outcome.

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## Orbits Implications

This scenario examines how increasing geopolitical competition could raise the risk of interstate conflict and threaten the rules-based international order. It highlights the importance of reassuring allies and preventing “gray-zone” conflicts from undermining international norms and from escalating into a war between major powers. Furthermore, the deployment of new capabilities, such as hypersonic weapons, autonomous systems, counterspace weapons, and cyber operations, introduces new—and not well understood—escalation dynamics that increase the risk of miscalculation.

Growing geopolitical tensions that produce destabilizing events and increase the dangers for all involved might provide incentive for rivals to find common ground and negotiate confidence-building measures to reduce risks. For example, the prospect of a “close call”—in which a major military conflict is barely averted or a large natural disaster illustrating the negative global impact of climate change—might compel nations to work together for self-preservation, leading to a more stable international order. Such an outcome, however, is not assured, highlighting the importance of managing increasing geopolitical competition in ways that reduce the risk of miscalculation and escalation while leaving open the possibility for greater cooperation on issues of shared risk.



## COMMUNITIES

**This scenario explores the issues that arise as the enormity of future economic and governance challenges test the capacity of national governments to cope, creating space for local governments and private actors and thus questioning assumptions about the future of governance. This scenario emphasizes the trends associated with the changing nature of power and advances in ICT that are enabling a broader array of influential actors and identifies how such trends might lead to choices that create both opportunities and hurdles for future governance. It is written from the perspective of a future mayor of a large Canadian city in 2035, reflecting on the changes she has witnessed during the previous two decades:**

The increasing role in governing of groups beneath and across national governments seems inevitable in retrospect. National governments simply proved less adept at managing some public needs in a rapidly changing environment than local governments, which were better attuned to increasingly powerful societal groups and commercial entities. In addition, as public trust in national government leaders and institutions continued to erode, more critical public services were privatized. Point-

to-point commercial transactions that did not rely on government intermediaries became more common, and people grew increasingly comfortable working through nongovernmental channels. This further diminished governments' ability to provide oversight—and to generate revenue through fees and taxes.

While critical state functions such as foreign policy, military operations, and homeland defense remained the province of national governments, local populations increasingly relied on local authorities, social movements, or religious organizations to provide a growing array of education, financial, commercial, legal, and security services. At the same time, businesses gained far-reaching influence through increasingly sophisticated marketing, product differentiation, and incentive programs to build intense customer loyalty that transcended borders. The involvement of private-sector companies in the lives of their employees grew as these companies expanded services, such as education, health care, and housing, they provided to their employees. Large, multinational corporations increasingly assumed a role in providing public goods and funding global research.



People increasingly defined their relationships and identities through evolving and interconnected groups outside of national government channels. Information and communication technologies are now key to defining relationships and identities based on shared ideas, ideologies, employment, and histories, rather than nationality. Furthermore, advances in biotechnologies led to class distinctions in some countries between those who could afford human modifications from those who were not artificially “enhanced.”

As the ability to control and manipulate information became a key source of influence, companies, advocacy groups, charities, and local governments were often more adept than national governments in exerting the power of ideas and tapping into emotions to sway populations to support their agenda. In some cases, governments willingly ceded some of their power to these networks of social and commercial “communities” in the hopes of defusing political divisions and public frustration—and of providing local services that national governments were unable to offer. In other cases, subnational entities, and alliances between them, asserted greater authority in defiance of national institutions.

In the Middle East, a “lost generation” of dissatisfied Arab youths, whose foundational experiences had been shaped by violence, insecurity, displacement, and lack of economic and educational opportunities—especially for women—emerged through information networks to challenge the traditional centralized governing structures. Arab youth in many countries demanded more services and political reforms to allow them to have greater say in the policies of their governments. Further, there was broad societal rejection of the violent religious extremism of the terrorist groups that emerged on the world stage in the early part of the 21st Century. Once started, these movements quickly spread throughout the region.

The experience of the Middle East repeated elsewhere, but not always with the same results. For example, amid a rocky leadership succession, Moscow found maintaining central control harder and harder as Russians banded together to protest rampant government corruption and the power of the oligarchs, and to urge local economic and political reform. Some regimes successfully engineered power-sharing arrangements with local authorities and some leveraged the resources of transnational foundations and charitable organizations to meet the needs of their societies. Others resorted to force to quell internal protests and employed advanced information technologies to identify and silence dissidents. China’s Communist Party initially took this approach but was forced to adjust its strategy and make compromises as retaining power through force alone became increasingly difficult. Other governments succumbed to internal pressures and fragmented along ethnic, religious, and tribal lines.

What resulted was messy. Governance globally evolved through a trial and error to address changing public needs and demands. The more agile and open states, like the United States, adapted their governing approach to public engagement and policymaking by harnessing the power of subnational and nonstate actors, increasing the importance of cities and other forms of local governance. City leaders, like myself, increasingly worked with our counterparts from around the world, with the encouragement of our national governments, to share information and resources and to develop new approaches to common problems, such as climate change, education, and poverty reduction.

Adjusting to this new style of governing was easier for Canada, the United States and other liberal democracies that had a tradition of strong, local public and private sector leadership, in contrast to countries with

centralized governments. Authoritarian regimes that resisted the increasing diffusion of power and tried to limit and control the activities of nongovernmental organizations, for example, continued to experience widespread popular movements that sapped their authority. In the worst cases, extremists, criminal gangs, and warlords flourished in areas where national government lost control of parts of its territory.

Over time, commercial and religious organizations, as well as civil society groups and local governments, became multi-stakeholder coalitions of various sorts—some including national governments. These new approaches to solving global challenges gradually coalesced around common values, including human rights. States, city and civic leaders, and commercial and civil society organizations now routinely participate in regional and interregional processes and issue-based networks to create alternative venues for driving positive change. Social movements, religious organizations, local governments, and publics propel the political agendas of national governments. Removed from its old “Cold War” context, the term “Free World” now defines the networked group of state, substate, and nonstate entities that work cooperatively to promote respect for individual freedoms, human rights, political reform, environmentally sustainable policies, free trade, and information transparency.

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## Communities Implications

This scenario examines issues associated with the future of governing. In it, governments will need policies and processes for encouraging public-private partnerships with a wide-range of actors—city leaders, non-governmental organizations, and civil societies—to address emerging challenges. Large multinational corporations and charitable foundations, in particular, might increasingly complement the work of governments in providing research, education, training, health care, and information services to needy societies.

While states will remain the primary providers of national security and other elements of “hard power,” their ability to leverage communities of local, private, and transnational actors would enhance their “soft power” attributes and resilience. Liberal democracies that encourage decentralized governance and private-public partnerships will be best suited to operate in this world. In these societies, technology will enable interactions between the public and government in new ways, such as collective decision making. Other governments, however, might not fare as well, leading to a variety of outcomes, including increased authoritarianism and state failure.



WHAT THE SCENARIOS  
TEACH US: FOSTERING  
OPPORTUNITIES  
THROUGH RESILIENCE





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Diverse plants adapt to a desert climate.

## WHAT THE SCENARIOS SUGGEST: FOSTERING OPPORTUNITIES THROUGH RESILIENCE

**Examining the trends across the three scenarios makes vivid that the world will become more volatile in the years ahead.**

States, institutions, and societies will be under pressure from above and below the level of the nation-state to adapt to systemic challenges—and to act sooner rather than later. From above, climate change, technology standards and protocols, and transnational terrorism will require multilateral cooperation. From below, the inability of government to meet the expectations of their citizens, inequality, and identity politics will increase the risk of instability. Responding effectively to these challenges will require not only sufficient resources and capacity but also political will. Moreover, the extent of these challenges might overwhelm the capacity of individual states and international institutions to resolve problems on their own, suggesting a greater role for a wide range of public and private actors.

**The scenarios also highlight, however, that the very same trends heightening risks in the near term can enable better outcomes over the longer term if the proliferation of power and players builds resilience to manage greater disruptions and uncertainty.**

In a world where surprises hit harder and more frequently, the most successful actors will be those that are resilient, enabling them to better adapt to changing conditions, persevere in the face of adversity, and act quickly to recover after mistakes.

Although resilience increases in importance in a more chaotic world, traditional calculations of state power rarely factor in a state's resilience. The sudden collapse of the Soviet Union and the breakdown of state authority in the aftermath of the "Arab Spring" suggest that states can be fragile in ways that conventional measures of power do not capture.

- For example, by traditional measures of power, such as GDP, military spending, and population size, China's share of global power is increasing. China, however, also exhibits several characteristics, such as a centralized government, political corruption, and an economy overly reliant on investment and net exports for growth—which suggest vulnerability to future shocks.
- Alternatively, the United States exhibits many of the factors associated with resilience, including decentralized governance, a diversified economy, inclusive society, large land mass, biodiversity, secure energy supplies, and global military power projection capabilities and alliances.

The governments, organizations, and individuals that are most capable of identifying opportunities and working cooperatively to act upon them will be most successful, but the window for forging new patterns of cooperation is narrowing. The collective action challenge is becoming more pronounced as global challenges grow. The near-term choices of individuals, organizations, and states will shape how the current governability and cooperation crisis is addressed, or whether an extended period of ad hoc, uncoordinated responses to uncertainty and volatility will intensify tensions within, between, and among states. Alliance management, improvement of national governance and international institutions, and openness to mobilizing a wide range of commercial, religious, civil, and advocacy organizations at all levels of government will be key to sustaining positive outcomes.

**Issues that lead to shared vulnerabilities and the need for global approaches—such as climate change and expanding terrorist threats—might induce states to increase their**

**resiliency, particularly if cooperation were limited.** These issues might also push states to find far greater utility in international institutions and other transnational forums to develop solutions and coordinate actions. In turn, such developments might prompt a new era of global engagement that includes states along with local governments, companies, and civil society groups working cooperatively to deal with existential challenges facing humanity.

- Two high-profile UN initiatives—the “Sustainable Development Agenda” and the “Framework Convention on Climate Change”—set broad strategic goals to be pursued through cooperation between governments and public-private partnerships. Such efforts allow parties to refine the programs over time and enable corporations and civil society groups to play a role in forging international norms and global governance arrangements.
- Increasing resilience at the institution level could also occur through the employment of dedicated strategic planning cells, exercises, technologies, and processes that would accelerate responses during crises.
- The election of future UN Secretaries General also will provide opportunities to pivot the strategic direction of the UN's system of agencies and to rethink priorities in light of emerging challenges as senior leadership and appointments change.

**The downsides of globalization that drive some governments to adopt protectionist and nationalist policies might also create opportunities to increase resilience and innovation at local levels.** The slowing of globalization and trade and the advent of additive manufacturing (3-D printing) technologies might lead to increased emphasis on near-by services, improving the self-reliance of local societies and groups. These developments might set

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## Assessing State Resilience

Measuring a state's resilience is likely to be a better determinant of success in coping with future chaos and disruption than traditional measures of material power alone. Tomorrow's successful states will probably be those that invest in infrastructure, knowledge, and relationships resilient to shock—whether economic, environmental, societal, or cyber.

Factors enhancing the resiliency of states, according to existing research, include:

- **Governance:** Governments capable of providing goods and services, promoting political inclusiveness, enforcing the rule of law, and earning the trust of their populace will be better positioned to absorb shocks and rally their population in response.
  - **Economics:** States with diversified economies, manageable government debt and adequate financial reserves, robust private sectors, and adaptable and innovate workforces will be more resilient.
  - **Social System:** A prepared, integrated, and orderly society is likely to be cohesive and resilient in the face of unexpected change and have a high tolerance for coping with adversity.
  - **Infrastructure:** The robustness of a state's critical infrastructure, including diversified sources of energy and secure and redundant communication, information, health, and financial networks, will lessen a state's vulnerability to both natural disasters and intentional attempts to create disruption through cyber and other forms of attack.
  - **Security:** States with a high military capacity, capable and trusted domestic law enforcement and emergency responders, good civil-military relations, and robust alliances will more likely be able to defend against unexpected attacks and restore domestic order following a disruptive shock.
  - **Geography and the Environment:** States that have a large land mass, high levels of biodiversity, and good quality air, food, soil, and water will be more resilient to natural disasters.
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the stage for a new wave of entrepreneurship and manufacturing that provides economic benefits to local communities. Governments and academic institutions, historically the source for science discoveries that enable private sector development, could encourage local developments that boost additional productivity and innovation by expanding public access to science and technology education and resources and by providing basic research.

**Initiatives to provide continuous workforce education, enable a mobile and secure workforce, and preserve technology leadership in multiple disciplines will enhance the resilience of states to potentially disruptive advances in technology, such as automation, data analytics, artificial intelligence, and biotechnologies.** Such resilience would mitigate the near-term risk to jobs and markets and allow the technologies to produce greater economic efficiency and productivity over time.

- Public-private continuing education would assist workforces in affordably adapting to changing job markets and potentially diffuse populist sentiment that elites disregard the average worker. Such initiatives, akin to the German apprenticeship model, could involve collaboration between governments, private industry, and education institutions—private or public—to train new or newly arrived workers, recently displaced employees, and the long-term unemployed.
- Academic institutions could develop curricula through consultation with would-be employers on necessary skills, creating pools of workers fully prepared to make use of new and evolving industries—commonly cited as a constraint on hiring for many high-tech businesses. These efforts could help academic institutions

remain current and relevant, as well as reduce the long-term need for public assistance for idled workers.

Such programs, which could encourage corporate participation through tax incentives or wage subsidies for new hires, would particularly benefit developed industrialized countries experiencing rapid technology adoption, global labor competition and shrinking, but highly educated, working-age populations. Such initiatives might also protect intellectual property rights, provide incentives for new-industry start-ups to locate in sponsoring communities, and preserve national leadership in defining technology protocols and standards.

**Transparency enabled by communication technology will build resilience by enhancing citizens' visibility into government processes, supporting anti-corruption measures, and moderating divisive impulses.** The creation of media and technology organizations that provide objective reporting and support transparent fact-checking would be a step toward building a foundation for enhanced trust in government and institutions. Coupled with education on critical thinking skills, increased transparent communication could reduce fear and broaden citizens' understanding of different perspectives. With greater trust, historically disengaged populations such as minorities could seize on the opportunity for greater inclusion and a more free exchange of ideas.

**Generating resiliency in currently troubled societies, such as those in the Middle East, also requires reducing the forces promoting extremism.** Nascent indications of popular frustration in the Middle East with the abuses of extremism couched as "Islamic" might propel local populations to reject extremist ideologies and instead push for new political reforms. Across the Middle East and North Africa, extremists who claim Islamic affiliation are inspiring some



to disaffiliate themselves with Islamists, openly or in private. For example, Ennahda, Tunisia's ruling political party, recently announced its intention to no longer identify as Islamist but rather as Muslim democrats, citing, in part, sensitivity to the connotations of the label.

**Investments in data, methods, modeling, and surveillance of critical human and natural-support systems—such as infrastructure, energy, water, and air quality—could spark emergent technologies in sustainability, increasing community and environmental resilience. The likely widespread private-sector demand for mitigation technologies and services will drive some countries and corporations to dominate this new market early.** The profitability of such developments could in turn offset the need for a natural disaster or other crisis to change the politics of this issue. Programs that simultaneously strengthen short-term crisis response capacity and the long-term development of climate-resilient and adaptive systems would minimize potential economic losses from ongoing demographic and environmental pressures. Beneficiaries would span construction, energy, mining, agriculture, insurance, finance, and R&D sectors and have local to international impact.

**The most resilient societies will also be those that unleash the full potential of individuals—including women and minorities—to create and cooperate. Such societies will be moving with, rather than against, historical currents, drawing upon the ever-expanding scope of human agency and skill to shape the future.** In all societies, even in the bleakest circumstances, there will be those who choose to improve the welfare, happiness, and security of others—and who will use transformative technologies to do so at scale. The opposite will be true as well—destructive forces will be empowered as never before. The central choice before governments and societies

is how to blend individual, collective, and national endowments in a way that yields sustainable security, prosperity, and hope.



## METHODOLOGICAL NOTE

As with every *Global Trends*, the National Intelligence Council (NIC) seeks to innovate its approach, employ rigorous foresight methods, learn from ever more diverse perspectives, and maximize its policy relevance. We built on this tradition for the current and sixth *Global Trends* report by introducing several new elements to our analytic process.

- We examined regional trends first and aggregated those assessments up to identify broader global dynamics.
- We assessed emerging trends and their implications in two timeframes: a near-term, five-year look that focused on issues confronting the next US administration and a long-term, 20-year projection to support US strategic planning. This is why we have dropped the year from the title.
- We developed a new concept for thinking about geopolitical “power,” moving away from past methods that overemphasized state-based material power, such as Gross Domestic Product and military spending, to consider also nonmaterial aspects of power, such as ideas and relationships, and the rise of consequential corporations, social movements, and individuals.
- We made extensive use of analytic simulations—employing teams of experts to represent key international actors—to explore the future trajectories for regions of the world, the international order, the security environment, and the global economy.
- We considered the potential for discontinuities in all regions and topic areas, developing an appreciation for the types of discontinuities likely to represent fundamental shifts from the status quo. These are highlighted in the text as fictional news articles from the future.

Early on, we reviewed enduring, bipartisan US planning assumptions since 1945 to identify those most and least likely to be in tension with the emerging strategic context. These exercises helped us prioritize issues, countries, and people to visit, and manage the scope of research. Ultimately, our two-year exploration of the key trends and uncertainties took us to more than 35 countries and meetings with more than 2,500 individuals—helping us understand the trends and uncertainties as they are lived today and the likely choices elites and non-elites

will make in the face of such conditions in the future. Visits with senior officials and strategists worldwide informed our understanding of the evolving strategic intent and national interests of major powers. We met and corresponded with hundreds of natural and social scientists, thought leaders, religious figures, business and industry representatives, diplomats, development experts, and women, youth, and civil society organizations around the world. We supplemented this research by soliciting feedback on our preliminary analysis through social media, at events like the South by Southwest Interactive Festival, and through traditional workshops and individual reviews of drafts.

Like previous *Global Trends* reports, we developed multiple scenarios to describe how the key uncertainties and emerging trends might combine to produce alternative futures. The scenarios also explore the key choices, which governments, organizations, and individuals might make in response to emerging trends that might realign current trajectories leading to opportunities to shape better futures.

Ultimately, we offer “Global Trends: Paradox of Progress” as a framework for understanding the world’s complexity and its potential for sharp, imminent discontinuities. The project reflects our own assessment of the trends and implications as professional analysts who do our best to “call them as we see them.” The judgments do not represent official US Government policy, or the coordinated position of the US intelligence community. We offer them humbly, fully recognizing the audacity of the task and that we will have made errors—all of which are ours alone. We believe, however, that sharing with the world our assessment of the near and more distant futures provides a starting point for a shared understanding of the risks and opportunities to come.

## GLOSSARY

**Climate** encompasses the averages, variability, and other statistics of weather over several decades or longer, while **weather** reflects short-term conditions of the atmosphere in a particular region. Weather includes very hot or cold or rainy days, while extreme weather events include extended droughts, floods, heatwaves, coldwaves, and intense tropical storms.

**Climate change** reflects nonrandom change in climate measured over several decades or longer.

**Climate variability** reflects the way that climate fluctuates above or below long-term average values.

We use the terms **developed and developing countries** to differentiate between states that are broadly industrialized with relatively high per capita incomes and those where industrialization and wealth are more limited. For the purpose of this study, “developing countries” are those included in the IMF’s “emerging markets and developing countries” group, defined as all countries besides the advanced economies of the United States, Canada, Western Europe, Japan, South Korea, Australia, and New Zealand. Although the World Bank now uses more precise terms to characterize economic

development and more organizations are likely to do so, we retain the traditional terms, given their widespread conventional use, including by the United Nations and business entities.

**Globalization** is the process of interaction and integration among the world’s people, companies, and governments, driven by the movement of trade, capital, people, ideas, and information across borders.

We follow World Bank researchers in defining **governance** as “the traditions and institutions by which authority in a country is exercised.” This includes “the process by which governments are selected, monitored, and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.”

**Internally displaced person (IDP)** is a person or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or manmade

disasters, and who have not crossed an internationally recognized national border.

**International system** refers to the distribution of power and interactions among states as well as the suite of institutions, rules, and norms that guide these interactions. The term **international order** is often used to characterize the nature of these interactions, typically associated with specific types of order such as the rules-based international order created after 1945.

**Islamist** describes a movement or approach dedicated to increasing the role of Islam in politics and sometimes other aspects of public life, and may or may not be violent.

**Major economies** are the world's largest developed economies—the G7 member states: the United States, Japan, Germany, the UK, France, Italy, and Canada, plus China. These are not the “largest economies,” because Brazil and India have surpassed Canada and Italy in nominal terms, and several additional countries—Russia, Indonesia, Mexico, South Korea, and Saudi Arabia—supplant some G7 members in purchasing power parity terms. Nonetheless, we have used this grouping to reflect a balance of national economic size and per-capita wealth, as well as shared demographic challenges.

A **migrant** is any person who is moving or has moved across an international border or within a state away from his/her habitual places of residence, regardless of 1) the person's legal status; 2) whether the movement is voluntary or involuntary; 3) the causes driving the movement are; or 4) duration of stay.

**Migration** is the movement of a person or a group of persons, either across an international border or within a state. Migration is a population movement, encompassing any kind of movement of people, whatever its length, composition, and causes. It includes refugees, displaced persons,

economic migrants, and persons moving for other purposes, including family reunification.

**Nationalism** is an ideology based on the premise that an individual's loyalty and devotion to the nation surpass other individual or group interests. A **nation** is a large body of people united by common descent, history, culture, or language, living in a particular state or territory. A nation may or may not be a state.

**Nativism** is the promotion of the interests of native-born or established inhabitants against those of newcomers or immigrants and may also be expressed as an emphasis on traditional or local customs as opposed to outside influences.

**Populism** is a political program that champions the common person, usually in contrast to elites. Populist appeals can be from the political left, right, or combine elements of both. Populism can designate democratic and authoritarian movements and typically promotes a direct relationship between the people and political leadership.

A **refugee** is a person who, according to the 1951 UN Refugee Convention, “owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinions, is outside the country of his or her nationality and is unable or, owing to such fear, is unwilling to avail him or herself of the protection of that country.”

## ACKNOWLEDGEMENTS

The process of creating Global Trends is as important as the final report. The NIC learns from individuals and organizations around the world while coincidentally fostering strategic, future-focused discussions across cultures and interests. Our two year process began in 2014 and took us to 36 countries and territories—allowing us to build up from roughly 2,500 local and diverse perspectives to a global view.

On each trip, we met with people from all walks of life in major cities and often smaller towns. We sought perspectives from the worlds of business, philanthropy, science, technology, arts, humanities, and international affairs. We met with religious men and women, people of deep formal learning and those schooled in practical matters. Our visits with students and youth were especially valuable—challenging us to see what could be. Without fail, our interlocutors were generous with their insights and time, even when delivering difficult messages. “A-ha!” moments were plentiful, helping us make connections across regions and topics. A few interlocutors, no doubt, sought to shape the views of official Washington but most shared with us their expectations of the future, whether locally or internationally. Importantly, virtually

all saw themselves in some way responsible for the world to come—driving home our key finding that the choices and actions of individuals matter more now than ever.

Although we can thank only a few individuals and organizations by name, we owe everyone we met a debt of gratitude. We appreciate as well the support of the Department of State and its Embassy country teams who facilitated many of these engagements.

***Africa.*** In Angola, civil society and government organizations shared insights on urbanization and poverty reduction and helped us understand how Luanda, Africa’s fourth largest city, is preparing for the future. A very brief visit to Botswana spotlighted key opportunities to build on past governance successes. In Congo, we appreciated discussions with civil society, government, and traditional leaders. In Senegal, we benefitted from discussions on religion, technology, and youth at think tanks. Meetings elsewhere on the continent helped us explore the region’s demographic and economic potential as well as recent dynamics in technology, energy, and identity politics.



**Asia and the Pacific.** In Australia, the Office of National Assessments, Australia National University's Futures Hub at the National Security Institute, Lowy Institute, and Commonwealth Scientific and Industrial Research Organisation arranged workshops and provided critical feedback throughout. Our time in Burma was spent with numerous civil society and government organizations on interfaith, political reform, and conflict resolution issues. In China, repeat visits to China Institutes of Contemporary International Relations and Peking University were especially helpful—as were sessions with the China Institute for International Strategic Studies, Nanjing University, National Defense University, Fudan University, Renmin University, and the Chinese Executive Leadership Academy at Pudong. In Indonesia, we gained valuable insights from meetings with students, environmentalists, business figures, provincial officials, human rights activists, and religious leaders as well as from the Centre for Strategic and International Studies, the Institute for Policy Analysis of Conflict, and other think tanks. In Japan, we thank the Japan Institute for International Affairs, Tokyo Foundation, Institute for Energy and Economics, and the Asian Development Bank Institute, among others. In Singapore, the Prime Minister's Strategy Office, the S. Rajaratnam School of International Studies, and the National University of Singapore East Asian Institute were especially helpful on geopolitics and foresight methodologies. In South Korea, we were treated to an event organized by ASAN and learned much as well from the WTO Law Center, EWHW Women's University, Seoul National University, and Hankuk University of Foreign Studies. We thank especially Australia's Rory Medcalf and Andrew Shearer, China's Cui Liru and Da Wei, Shingo Yamagami in Japan, and Singapore's Peter Ho for helping us better understand Asia's changing dynamics and their global implications.

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