



# Scenarios to 2030:

## Themes shaping the future of our world (Summary theme document)

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# Introduction and context

This document presents a discussion of global themes that are likely to shape the political, economic, social, institutional, technological, and operational environments of the world through 2030. The thematic discussions presented here are abridged versions of a more comprehensive document that seeks to understand the major forces shaping the future of the world. They were developed as inputs into a larger scenario planning project to understand potential outcomes that will determine the future operating environment for global institutions and their interactions with partners, stakeholders, and citizens in both the developed and developing world.

The themes were crafted through an iterative process involving Eurasia Group thought leaders, analysts, and outside experts. Taken together, they seek to be comprehensive, individually and collectively probable, and relevant to the future landscape for global institutions. The themes range across four primary dimensions: Institutions, Ideas, Economics, and Technology. Each theme was developed through a systematic process. We first identified a large set of drivers, organized around the four dimensions listed above. Examples of factors that were considered include economic growth, gender equality, urbanization, income inequality, and demographics, among many others. We then grouped those drivers, cutting across the four dimensions, into the nine distinctive and interdependent themes, considering trajectory and impact. Likely and alternate directions of each driver were identified by analyzing relevant data (which are collectively compiled into a driver factbase).

Each abridged report begins by laying out a likely path for the theme. Potential policy interventions and responses, as well as potential exogenous shocks from technological and other developments, are then discussed. An exploration of the implications and relevance of each theme for the US, Europe, China, India, and Africa (and other relevant geographies, where appropriate), as well as a number of key sectors (education, healthcare, and agriculture, where appropriate), conclude each section.

Collectively, the nine themes elaborated in this report present a “basecase” of the future outlook. However, given the likelihood of policy and other responses, the interdependent nature of the themes, and the complexity of forecasting, alternate directions and outcomes are explored. For sake of clarity, these alternative outcomes – ranging from negative to positive – are presented in chart form as a probabilistic range at the end of each theme discussion.

## Executive summary

### The geography of low growth

- Owing to number of structural challenges, through 2030, growth will be generally lower in advanced economies and more varied and, in general, lower in the emerging and developing world.
- A more fragile global economy suggests heightened risks of and fewer resources to respond to financial crises; global labor markets may experience large dislocations, although there will be large regional and country-level differences in severity.
- More fundamentally, slower growth suggests heightened risk of policy backlash against financial and trade globalization that could result in a slowing – and potentially even a reversal – of the 40+ year trend toward global income convergence.



## The changing landscape of labor

- Automation will reduce the returns to labor through 2030, driving different responses and outcomes between rich and poor countries, and at the regional and country levels.
- The demographics of emerging economies will condition this trend and its effects on future labor markets. Automation poses the greatest challenges for countries with large youth populations, poor education systems, weak institutions and low per-capita income.
- In this context, political capacity will be a crucial factor in determining a variety of socioeconomic and political outcomes. Successful countries will be able to gain productivity and wealth, easing fiscal constraints and funding income redistribution and other programs to mitigate the more nefarious effects on low-skilled jobs.

## New financial blueprints

- The erosion of consensus views around capital accounts and floating exchange rates will lead to a remodeling of the global financial architecture through 2030.
- A growing acceptance of capital controls – a broader pullback from financial globalization – will give way to financial market vulnerability and drive potential sources of crises.
- Emerging financial technologies will present opportunities for bypassing traditional institutions and expanding access to global capital markets.

## Climate change: Environmental stress, conflict, and response

- Climate change will drive an increase in the frequency and severity of environmental stresses through 2030.
- This will generate increased conflict over natural resources – particularly when coupled with poverty, poor governance, and weak state capacity – therefore breeding potential sources of new disruptions, and creating a variety of negative health effects.
- In the broader context of a low-growth environment and a less effective multilateral system, effective collective action on climate change will likely prove insufficient, creating scope for state and non-state actors to respond.

## The state: Shifting identities, changing demands, and new competitors

- The socio-economic and political dislocations experienced by individuals and communities will force shifts in national, ethnic, and religious identities through 2030.
- These shifts will drive new and increasing demands for the goods and services typically provided by states. State capacity to meet these demands, however, will vary and create scope for non-state and sub-state actors to deliver such “stateness.”
- Moreover, state capacity will become an increasingly salient determinant of a wide variety of growth and development outcomes.

## Volatile paths to a multipolar world

- The US-led system of global multilateral trade agreements, security alliances, and international financial institutions will weaken through 2030. Meanwhile, the EU will grow preoccupied with internal and external challenges, and China (alongside other emerging powers) will gain increased influence, giving way to a multipolar global system.
- Though this multipolar world may be more stable, the path to achieve it will be volatile – generating intensified conflict over issues such as international macroeconomic coordination, financial regulatory reform, trade policy, and climate change, and conditioning the geopolitical environment for the emergence of fat tail risks.
- This trend will give rise to a more fragmented global institutional landscape and a more contentious multi-lateral agenda.



## The fraying of the social fabric

- Rising income inequality within many industrialized and emerging market countries will continue into 2030. This will undermine social cohesion and drive decreased political trust and satisfaction, as well as the reconstitution of value systems and the risk of conflict.
- As rising income inequality sows distrust, people will increasingly turn away from formal political participation and operate outside of existing institutions, via independent political movements and other informal activities.
- Within-country income inequality will call social contracts into question as perceived socio-economic and political needs go unmet. To avoid erosion of their political legitimacy and stability, governments will be compelled to explore new kinds of social contracts.

## The erosion of liberal values

- Over the forecast period, support for traditional liberal values will erode across the globe. This will be evident in three areas: 1) a decline in support for economic liberalism; 2) a decline in support for democratic institutions; 3) and shifting attitudes toward social liberalism.
- As belief in the supremacy of liberal institutions withers among developed-world populations, there will be less pressure on governments to support the spread of those values abroad, particularly in parts of the developing world where they are more fragile.
- Social media will exacerbate this trend, giving way to more tolerance for illiberal and authoritarian forms of governance.

## Science, technology, and the changing nature of human interaction

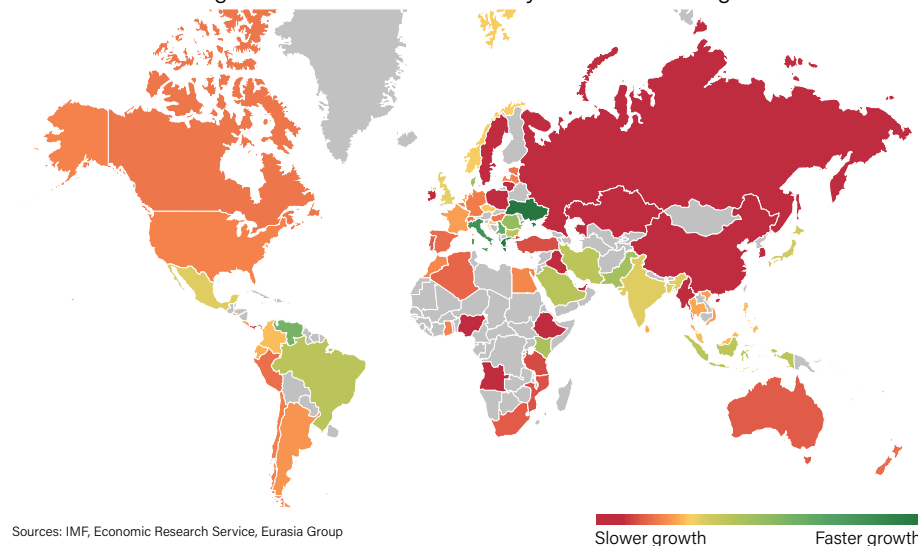
- The pace of innovation – in digitization, in the material sciences, and in biotechnology – is increasing globally.
- This rapid pace of technological development is driving unprecedented, exponential economic, social, and political change.
- Through 2030, new innovations will change individuals' relationship with their environment, their relationship with machines, and their ways of organizing.



# The geography of low growth

Global economic growth is likely to face a number of structural challenges through 2030. In the absence of coordinated policy responses or exogenous technology shocks, these challenges suggest: 1) despite a cyclical recovery in the early part of the forecast period as the fiscal stance becomes more accommodative, growth will still be generally lower in the advanced economies than seen over the pre-2008 period and especially in comparison with 1945-73; (2) growth will be more varied at the country and regional level and in general lower in aggregate in the emerging and developing world, and (3) the world will experience significant economic and political dislocations related to automation, financial and trade globalization, and other structural shifts. Moreover, new technologies and changing patterns of demand will lead to fundamental changes to the structure of the global natural resources and energy economy, with large implications – both positive and negative – for producing regions and countries.

Forecasted annual growth to 2030 relative to 20-year historic average



## Outlook

### Advanced economies

In the advanced economies, growth may be slower than at any comparable extended period since 1945. Following the 2008-2009 global financial crisis, several arguments have emerged to advance the thesis that growth will remain low: inequality boosting savings too high (drawing on Hobson), technological stagnation (drawing on Hansen and now championed by Gordon), excess savings in emerging markets (Bernanke), a broken financial sector (Rogoff), and low expected inflation (Krugman, Blanchard), among others.

Former Treasury Secretary Larry Summers synthesizes these arguments in his “secular stagnation” thesis, which concludes that the advanced economies are suffering from a structural imbalance due to an increased propensity to save and a decreased tendency to invest. Excessive savings will drag on demand, reducing growth and inflation. Investment suffers from a persistent overhang following dramatic global capacity expansion in global resource and capital-



goods sectors, relatively low capital intensity in recent technological revolutions, and political barriers to investment in frontier areas where the return on capital would otherwise be higher.

## Developing economies

In emerging and developing economies, aggregate demand may suffer from the combination of weak external demand, elevated political risk, and falling demand for lower-cost labor as automation and AI change firm-level investment decisions. Lower returns to labor resulting from widespread adoption of automation will complicate the development path of many developing countries, along the lines of the premature industrialization argument advanced by Dani Rodrik and others. In its extremes, some developing countries may fall further behind, with declining incomes, rising poverty, and the potential for internal conflict along regional, ethnic, and religious lines.

Greater divergence in growth paths and outcomes across emerging and developing economies is likely to take place over the forecast period, depending on income levels, human capital and natural resource endowments and investment, the innovation environment, macroeconomic policies and stability, integration into the global economy, infrastructure investment and quality, level and type of industrialization, and policy choices of the government, among other factors.

## Policy interventions and alternate paths

The structural nature of the economic challenges facing the industrialized economies means that economic growth likely will remain low through 2030 unless there are structural changes that effectively raise the neutral real interest rate. This suggests that there are a range of policy interventions – either in coordination or carried out independently by the larger advanced economies – that could result in a higher growth path for the industrialized world. Key signposts for a transition to higher growth in these economies would include much higher (and higher quality) public investment, a shift in the Eurozone towards making the burden of adjustment more symmetric, measures to improve labor force participation especially among key groups (women in Japan, youth in Europe, prime-age males, especially minorities, in the US); regulatory reform, business tax reform, industrial policy, and import substitution (which, however, could have the undesirable side effect of lowering DM trend growth and limiting the opportunities for EM convergence).

## Theme relevance for key geographies and sectors

Slower growth relative to the 1945-2008 period implies potential slower reduction in global poverty. A more fragile global economy also suggests heightened risks of and fewer resources to respond to financial crises, which could result in acute country – or regional level increases in poverty. Global labor markets – particularly in developing countries in earlier stages of industrialization – may experience large dislocations, although there will be large regional and country-level differences in severity. More fundamentally, slower growth suggests heightened risk of policy backlash against financial and trade globalization that could result in a slowing – and potentially even a reversal – of the 40+ year trend toward global income convergence.

## Regional relevance

**US and Europe:** The major developed countries are likely to grow below their recent historical levels over the forecast period, notwithstanding the likelihood of a cyclical recovery driven by some fiscal expansion in the early years of the forecast horizon. Further out on the forecast horizon, coordinated global policy responses and/or productivity shocks resulting from widespread adoption of automation or other exogenous technology shocks could improve the outlook for global economic growth. This suggests additional fiscal pressures in the US and especially in Europe.



**Africa:** Africa’s growth outlook will likely improve from its current low point of 1.4% in 2016 to closer to 4% over the next decade, but the recovery will not return the continent to the 6%+ growth experienced from through the early 2000s. The lower level of growth continent-wide will largely be driven by the continent’s biggest economies – South Africa, Angola and Nigeria – all of which are large commodity exporters.

**Asia:** India is likely to be a bright spot in the global economy for much of the forecast period. China’s economy will continue to grow over the forecast period, although growth will slow as per capita income converges higher. If China follows the path of other East Asian countries – Japan, South Korea, Taiwan and Singapore – growth should slow to the 3-4% range over 2020-2030.

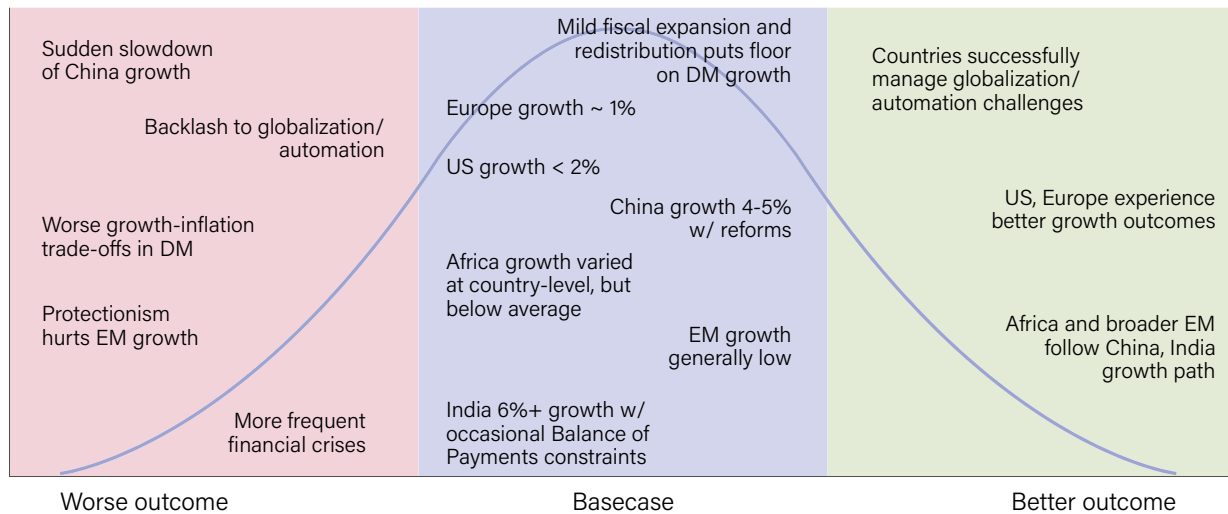
### Sector relevance

**Healthcare:** Slower growth suggests a future where healthcare needs increase, but where public spending struggles to keep pace. A key – and potentially quite positive – caveat is that large scale healthcare reforms have typically occurred on the heels of major political or economic crises, because they galvanize people toward change.

**Education:** The implications of slower growth for education will vary sharply at the regional and country level, but in general slower economic growth will put downward pressure on public education budgets, especially in the developing world and in resource-exporting countries. In the developed world, the slower growth environment – as well as labor market shocks from automation – may add an additional labor market premium to higher education, especially in math and sciences.

**Agriculture:** There is widespread evidence to support the positive correlation between increases in agricultural productivity and economic growth. Moreover, the agriculture sector has long been shown to be a key tool for generating economic growth and alleviating poverty in the developing world, where it accounts for a large share of the workforce and value added in the economy.

### Range of outcomes



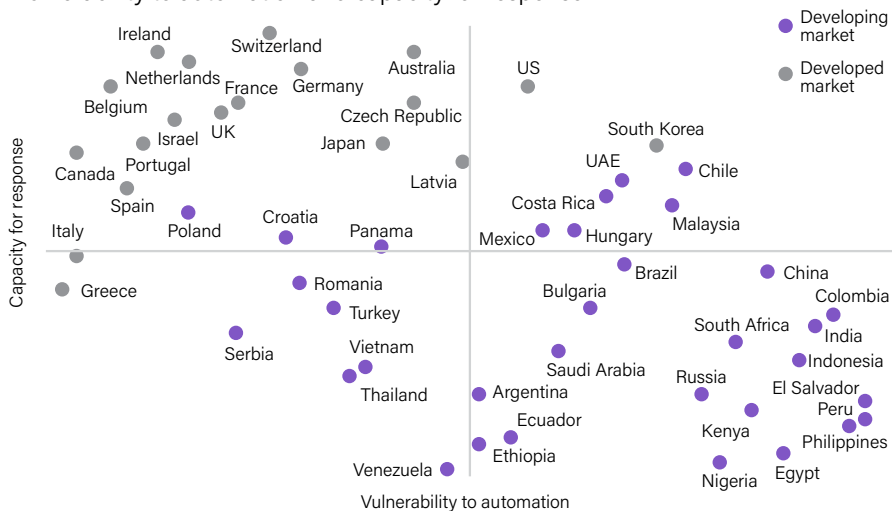
Source: Eurasia Group



# The changing landscape of labor

The automation of human tasks by technology will reduce the returns to labor through 2030, driving different policy responses and social and economic outcomes between rich and poor countries and at the regional and country levels. The demographics of emerging economies will condition this trend and its effects on future labor markets, particularly as countries with large youth populations (ie. Nigeria, Kenya, the Philippines) may be those most vulnerable to “premature deindustrialization.” In this context, political capacity will be a crucial factor in determining whether countries can meet the challenges of demographic structures and labor market trends, thereby shaping a variety of socio-economic and political outcomes.

Vulnerability to automation and capacity for response



Source: Eurasia Group

## Outlook

The application of technology toward automated processes has fueled the growth in productivity and wealth for hundreds of years. But this trend – along with the collapsing cost of computing power – mean that a huge number of jobs across sectors and industries will be vulnerable to outright replacement over the next few decades. Automation, robotics, and AI likely will make services and advanced cognitive and even creative tasks increasingly vulnerable to automation, cutting off potential sources of future job creation to replace jobs lost in the manufacturing sector. As computers increasingly carry out more complex analytic tasks, it will become more difficult for workers to move up the “cognitive value-chain” in search of future job opportunities.

### Advanced economies - understanding the productivity enigma

In advanced economies, technological trends should increase total factor productivity by reducing labor utilization, at least in the sectors directly vulnerable to labor automation. To date, however, this trend is not apparent in economy-wide productivity data. One potential explanation – which may persist over the forecast period – is that automation and technology, broadly speaking, are raising productivity and creating opportunities for high skilled and highly-paid jobs, while also creating low productivity and low wage service jobs (the so-called “butler economy”). This barbell effect suggests that, even as productivity rises significantly in many important sectors of the global economy, overall economy-wide productivity gains will be more limited.





## Developing economies - from demographic dividend to demographic margin call?

For poor and middle income countries, rapid changes in technology that reduce or eliminate demand for labor will diminish the role of labor-cost arbitrage in determining the location of manufacturing, in turn blocking the path to industrialization-based growth. As a result, these countries will languish in a precarious state of “premature deindustrialization,” where petty services and informal labor are the only employment option for millions of young people, unless they are educated at levels advanced enough to take advantage of the types of jobs created – or left intact – by automation.

Automation poses the greatest challenges for countries with large youth populations, poor education systems, weak institutions and low per-capita income. As automation takes hold, the most vulnerable countries will combine large youth populations, lower per-capita income, and weaker state institutions, such as Pakistan, Kenya, Nigeria, Ghana, the Philippines, Egypt, Ecuador, and Venezuela.

### Gender

Recent research suggests that women may be disproportionately vulnerable to labor market disruptions arising from automation. In the more advanced countries, office and administrative jobs are expected to be especially vulnerable to automation (even more so than manufacturing jobs); these job categories have especially high (above 90%) female participation. Conversely, the job categories expected to see growth as automation takes hold – computing and mathematical occupations, engineering, and management – generally have below 25% female participation.

## Policy interventions and alternate paths

The primary policy responses from governments across advanced and developing countries to automation will be, on the one hand, to capture productivity and wealth gains from automation while, on the other, to mitigate negative labor market effects. Governments can capture more gains from technology by investing in human capital and in high-tech infrastructure, by creating cities that are magnets for global talent, by investing directly and indirectly in research and technology, and by taking other steps to create a policy environment that supports innovation. The relative success or failure of these policies will condition whether countries are net losers or gainers from automation; successful countries will be able to gain productivity and wealth, easing fiscal constraints and funding income redistribution and other programs to mitigate the more nefarious effects on low-skilled jobs. Political and state capacity is a crucial factor in determining whether countries can meet the challenges associated with labor market displacement.

## Theme relevance for key geographies and sectors

Labor markets are likely to change markedly over the forecast period, with very different implications for advanced and developing countries, between regions, and between and even within countries.

### Regional relevance

**US and Europe:** The US and Europe will experience major labor market shifts as a result of automation and other technologies, but are better equipped than most middle-income or poorer countries because of demographics (fewer future jobs to create) and because they are more likely to capture wealth and productivity gains from automation and other labor-displacing technologies. However, the labor market shock in industrialized countries may contribute to populist and nationalist movements that are more skeptical about providing public goods for the rest of the world.



**Africa:** The IMF projects that sub-Saharan Africa’s working-age population will nearly triple by 2050. The current weak growth outlook will undercut job creation, leading to a growing unemployed youth population and the potential for social unrest. In this environment, existing government policies oriented toward developing a manufacturing base may be misplaced in a world of increasing automation.

**Asia:** India’s positive long-term growth outlook is based in part on the assumption that it can educate and find employment for its massive youth population to avoid serious social unrest. Protectionism amid slowing global growth, alongside automation, seriously threaten policymakers’ plans to make India the world’s next great manufacturing powerhouse. China will begin to emerge as one of the winners from automation in the years to 2030, thanks to significant government investment and shifting demographics.

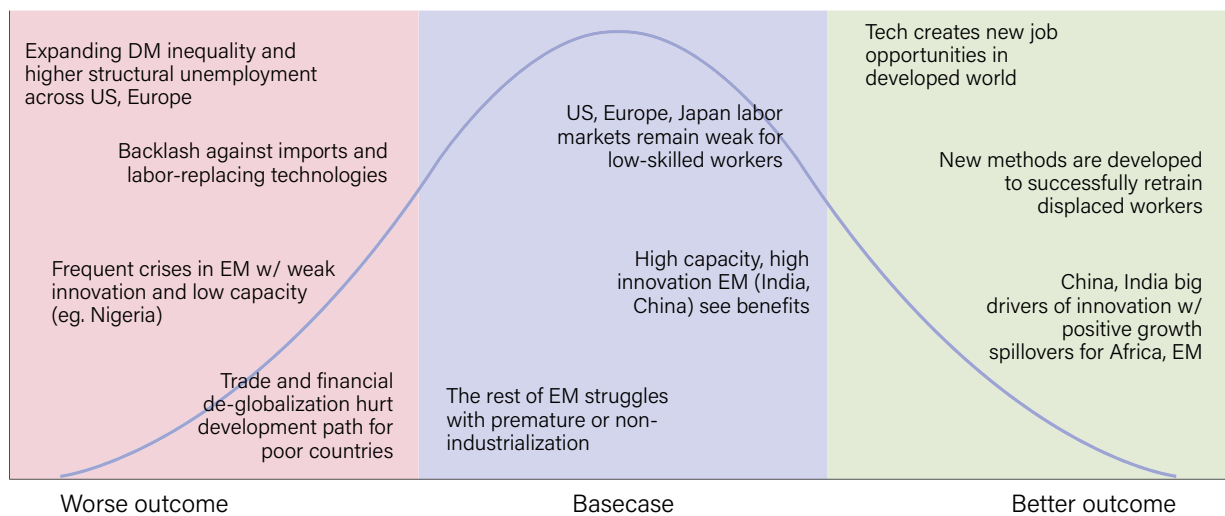
### Sector relevance

**Healthcare:** Automation-driven labor substitution will have both direct and second-order implications for healthcare. Directly, automation should translate to lower labor costs for payers. Indirectly, in parts of the developing world, as automation reduces the labor footprint of many multinationals, it will likely reduce their incentive to contribute to building stronger health systems. At the international level, automation will help change the global health conversation from being primarily focused on managing acute public health emergencies to addressing long term concerns.

**Education:** Automation and the new landscape of labor that it creates will affect the education sector in two primary ways: first, by shifting the demand for different types of skills and, second, by transforming the learning environment and means of education. The education sector will see a rise in non-traditional education formats and in re-training capacity to help offset automation’s more negative externalities. There will be also be greater pressures on the sector to incorporate new technologies (such as online courses) that drive down costs and raise productivity.

**Agriculture:** Agriculture is likely to see important productivity gains from technology, including automation, but may also see declining demand for labor. Technologies that raise agricultural productivity across the developing world will have several positive implications: the agricultural sector may contribute more to growth, technology may eliminate inefficiencies on pricing and market access that benefit farmers and smallholders, domestic food security will improve, and it may free up labor allowing rural migration into cities and higher-paying jobs.

### Range of outcomes

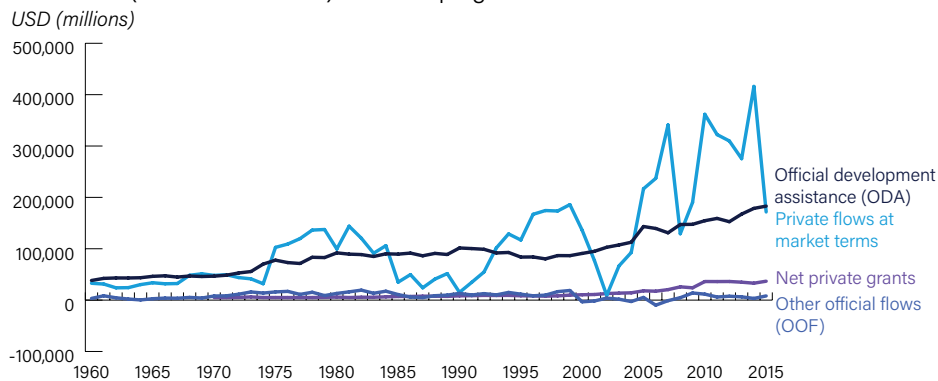




# New financial blueprints

The erosion of elite policymaker consensus will lead to a remodeling of the global financial architecture through 2030. Previously thought to be automatically stabilizing, open capital accounts and floating exchange rates will be challenged by a growing acceptance of capital controls. At the same time, new technologies in the financial space – including blockchain, digital currencies, mobile banking, and other disintermediating technologies – will present opportunities for bypassing traditional financial institutions and expanding access to global capital markets. These changes will have several lasting consequences: They will reduce some sources of systemic financial risks while creating other unforeseen vulnerabilities, widen access to finance, and potentially lead to the more efficient allocation of capital and financial services.

Total flows (net disbursement) to developing countries



Sources: OECD, Eurasia Group

## Outlook

### The intellectual consensus on the global financial architecture will change

One of the most significant developments in the intellectual policy landscape over the last few years has been the loss of faith in elite policymaker consensus that the combination of floating exchange rates and fully open capital accounts is automatically self-stabilizing. This reassessment has come after the experience of large capital flows in and out of emerging markets in the aftermath of the 2008 financial crisis.

This experience led to the recognition that there is a global financial cycle dominated by US monetary policy settings, which leads to sharp shifts in investor appetite for foreign (especially emerging market) assets. These sharp shifts can then lead to an inappropriate configuration of exchange rates and interest rates for domestic and international stability.

As a result, capital controls will return to intellectual respectability over the forecast period. There is also rising consensus among economists that many harmful activities are better taxed than banned. These factors make it likely that we have reached the high tide of financial globalization, that capital flow management measures will become increasingly acceptable, and that the taxation of flows will become the most likely instrument of “capital controls”.

This trend is compounded by rising populist and, in some cases, nationalist sentiment in the US and in Europe, which function as a backlash against open capital flows and to the broader issue of over-financialization.



## **Blockchain and digital currencies will disintermediate financial flows and challenge governments**

A number of new and emerging financial technologies have the potential to radically change the structure of global payments systems, with large and potentially disruptive implications for traditional intermediaries and for governments (including central banks and regulators). Chief among these are the emergence of private and sovereign digital currencies, blockchain technology and its derivatives and applications, and the application of big data and predictive analytics to financial services. These new technologies suggest that a different set of global systemic financial risks – including risks related to cybersecurity – will emerge over the forecast period.

While these technologies are in their infancy, over the first half of the forecast period, banks and other institutions will increasingly use them alongside existing systems, especially for international payments and securities settlement. This hybrid model will likely persist over the next five to ten years. Beyond that, however, a range of outcomes are possible, up to and including radical transformation, in which there is widespread adoption of sovereign digital currencies alongside a stateless digital currency that displaces cash and traditional sovereign currencies.

## **Fragmented regulatory responses**

Geopolitical shifts may result in a more fragmented global financial architecture, especially concerning regulation and systemic risk management. These strains on the existing architecture are likely to make it harder to forge consensus regarding future regulatory changes, generating disagreements over the national implementation of standards and challenges to the generally market-oriented liberal policy orthodoxy that has prevailed in the postwar era, and especially since 1980.

## **Policy interventions and alternate paths**

Country and/or regional responses will be critical in determining the macrosystemic global financial architecture. One key variable here is the Eurozone's ability to reach a level of mutualization that satisfies the minimum criteria for a single currency to be both economically viable and politically acceptable. The second is the extent to which the US political economy remains consistent with the provision of international public goods. The third variable is the extent to which China succeeds in converting itself into an alternative hub for an economic network configured around Chinese suppliers of commodities and goods and recipients of Chinese development capital. In combination with the likelihood that the world has reached the peak of a particular model of financial globalization, the most likely outcome becomes a tripolar global financial architecture built around the US, China and the Eurozone, a congruence of real and financial spheres of influence, and a capital flow model more attuned to the vulnerabilities stemming from large capital flows.

## **Theme relevance for key geographies and sectors**

There are several broad implications of the future trends discussed. The first is that the global economy may have already passed the peak level of financial globalization. Some pullback in global financialization, however, could reduce risks of systemic financial crises. Moreover, these trends, especially in the area of fintech, will create much more disintermediation in the flow of capital both within countries and around the world. This creates a host of opportunities including wider access, and potentially more efficient allocation of capital (and financial services) between owners and users of capital.



## Regional relevance

**Africa:** Broad capital controls are unlikely to be introduced across already open capital markets in sub-Saharan Africa over the early years of the forecast horizon. However, both Ethiopia and Nigeria will likely be outliers. Countries with entrenched restrictions like Ethiopia and Nigeria will be loath to weather the political ramifications of significant devaluations and may face less pressure to reform from multilateral institutions as attitudes shift in favor of capital controls. A rising African fintech industry will drive new technology adoption, increasing the banked population and forcing regulators to catch up.

**Asia:** Given its bright economic outlook, India likely will attract sustained investment inflows over much of the forecast period, helping it finance current account deficits and keeping the rupee relatively stable. This outlook also means that India is unlikely to experiment with capital controls. Expanded access to financial technology will disproportionately benefit India. In China, the eroding consensus on the desirability of open capital accounts and floating exchange rates will have several consequences. First, policymakers will be less likely to aim for full capital account liberalization. Second, China will use these concerns (among others) to increasingly push for a “multipolar” financial architecture in which it plays a significant role. China will likely be a global center for the adoption of fintech, particularly within the payments system space. However, significant government regulation of this sector could impact future growth.

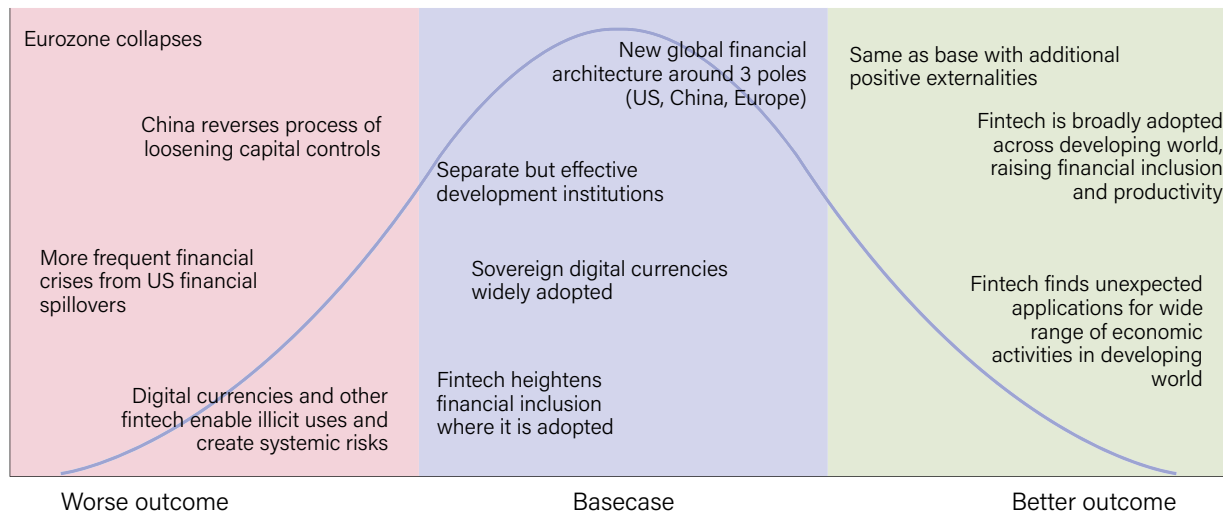
## Sector relevance

**Healthcare:** One implication of fintech for healthcare in developing countries is that it may serve as a platform for the mobile delivery of a wide variety of public and private services. Beyond the delivery of services, mobile platforms could provide important monitoring and communication services during crises, including outbreaks of communicable diseases.

**Education:** As with healthcare, fintech may build platforms that are used to deliver services related to education. This could include student funding for higher education, communication of curricula, and the monitoring and evaluation of educational standards for students and teachers.

**Agriculture:** The benefits of widespread adoption of mobile fintech applications in developing countries may disproportionately accrue to rural and agricultural areas, which often lack access to basic financial services. This includes not only banking, but insurance and access to markets and price data.

## Range of outcomes



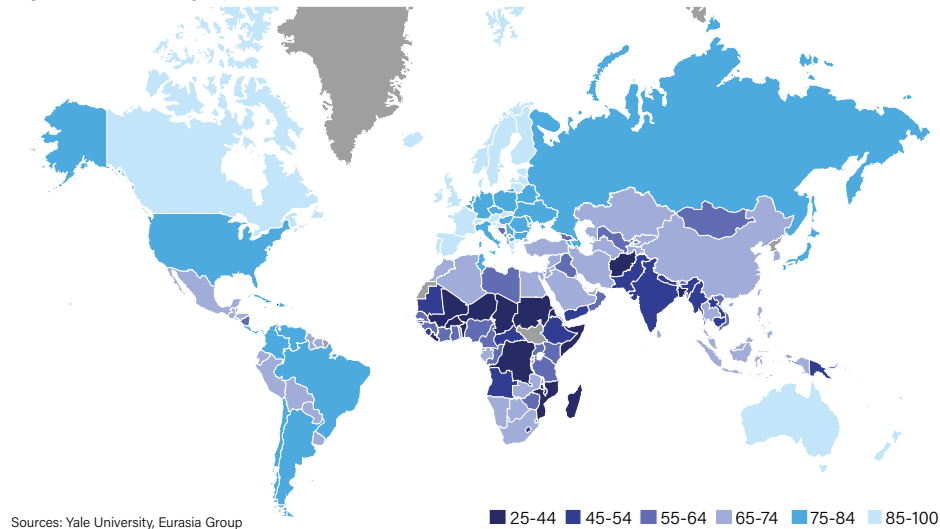
Source: Eurasia Group



# Climate change: Environmental stress, conflict, and response

As a consequence of climate change, the frequency and severity of environmental stresses will rise through 2030. This will generate increased conflict over natural resources and breed potential sources of new disruptions and negative health effects. International coordination in developing solutions will be constrained; meanwhile, local efforts will prove insufficient for solving an inherently global problem. This dynamic will create scope for state and non-state actors to respond. The ability of these actors to do so successfully will be in part determined by their levels of political and institutional capacity, which will vary across regions and countries.

Global 2016 Environmental Protection Index (EPI)  
*Higher score = stronger protection*



## Outlook

### Local responses will be inadequate to the challenge

Local and regional responses to global environmental challenges will, by their fragmented and partial nature, generally be insufficient for mitigating environmental stresses, especially over the long-term, and especially in poorer countries with weaker state capacity.

Local responses are likely to be better tailored to local needs and conditions, but absent a globally-coordinated or institutionally-guided approach, these actors will lack an external driver that are more likely to result in more comprehensive and constructive solutions to the most the serious environmental challenges.

### Global coordinated collective action will be constrained

The transition to a more multipolar world in which international institutions weaken means that rich industrialized countries are more likely to minimize their compliance with global rules and norms that clash with domestic political priorities. One of the biggest casualties of fragmenting international coordination is the environmental agenda.



There are a variety of highly politicized questions about the distributional impacts of both climate change and the attempts to mitigate its effects or reverse them. While market-based solutions based on recognizing the costs of negative externalities are now considered a “best practice” solution for climate change, the application of market solutions is much more controversial in other areas.

## Environmental stresses will contribute to geopolitical tensions and local conflict in Asia and Africa

A wide variety of social science research concludes that environmental scarcities are often a contributing factor to both international and civil violent conflict, especially when coupled with poverty, poor governance, and weak state capacity. The intensification of environmental stresses over the forecast horizon – in conjunction with the problems of coordinated and local responses detailed above – suggests that risks of environmental-related conflict, particularly in areas of India, South East Asia, and Africa, will increase.

## Policy interventions and alternate paths

There are a variety of potential outcomes related to climate change and other environmental stresses depending on both the severity of the environmental stresses and on the efficacy of both global and local responses. Local political and state capacity to respond will vary widely across (and even within) countries, and condition the range of possible outcomes.

## Theme relevance for key geographies and sectors

In the broader context of a low-growth environment and a less effective multilateral system, effective collective action on climate change will likely be elusive over the forecast period. While considerable uncertainty surrounds any 15-year forecasts for complex systems like global climate, adverse effects from climate change already have affected some of the world’s more vulnerable regions. Much of Africa and South Asia are particularly vulnerable to the adverse effects of climate change and broader environmental degradation, and many of these areas lack sufficient local institutional capacity to address such challenges without outside support.

## Regional relevance

**US and Europe:** The primary relevance for the US and Europe is their role in creating – and potentially unlocking – the collective action problems that are likely to constrain global coordinated responses to climate change. Environmental protection is one of the biggest casualties of fragmenting international coordination. In addition, there are likely to be significant ideological and political issues in the US in the early half of the forecast horizon, at minimum, that make collective solutions more difficult.

**Africa:** Rising temperatures and rainfall volatility are projected to increase the impact of droughts and floods across much of Africa, particularly by impairing agricultural productivity, exacerbating water shortages, and disrupting hydropower generation. This will leave subsistence farmers vulnerable to weather-related income volatility, offsetting gains from broader application of technology to agriculture, undermining progress toward moving out of poverty, and in turn driving continued economic migration toward Europe. Climate change, whether in the form of drought or excessive rain that leads to major flood and mudslide damage, will pose a major health risk for nearly all sub-Saharan African countries. Moreover, it is likely to exacerbate existing conflicts linked to a lack of grazing land and usable water in the Sahel, Horn and southern African bread basket.



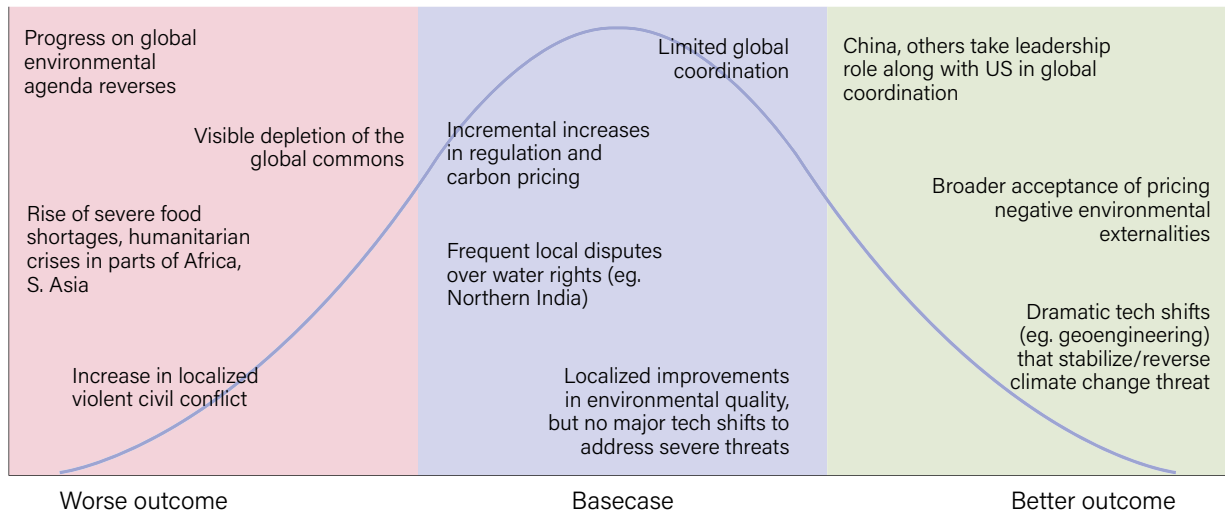
**Asia:** One primary environmental challenge for India is water scarcity, particularly in North India. Inter- and intra-state, as well as urban-rural, disputes over sharing access to water bodies will sharpen as demand on these strained resources grows. Environmental changes will also threaten Indian agriculture and worsen the incidence of diseases. China, too, will face severe water shortage issues, as well as air quality problems, driving instances of social unrest. This will further compel the government’s efforts to reach a multilateral climate deal.

### Sector relevance

**Health:** Environmental stresses will amplify a number of healthcare challenges, shifting the locus of the needy, their needs, and the institutions that serve them. The WHO projects that by 2030, climate change is expected to result in 250,000 deaths worldwide from a combination of infectious disease, heat stress, and malnutrition—and disproportionately affect women, children, the elderly, and the poor. By buoying the burden of infectious disease (eg, by changing vector-borne disease epidemiology, reversing global improvements in access to clean drinking water, etc.), climate change has the potential to leave stakeholders with less resources to address chronic healthcare issues.

**Agriculture:** Some of the heaviest burdens of global climate change will be borne in agriculture, especially in developing countries in Africa and South Asia where the local impacts may be most severe. Agricultural yields and production will be vulnerable to extremes in climate (both water scarcity and periodic flooding), higher temperatures, and changing crop suitability for regions undergoing local climate change. While the negative impacts on agriculture may, in some cases, be offset by the adoption of yield-enhancing technologies, climate change at minimum will contribute to more variability in production, particularly for less well-capitalized or subsistence agriculture, contributing to the risk of food scarcity and famine.

### Range of outcomes



Source: Eurasia Group

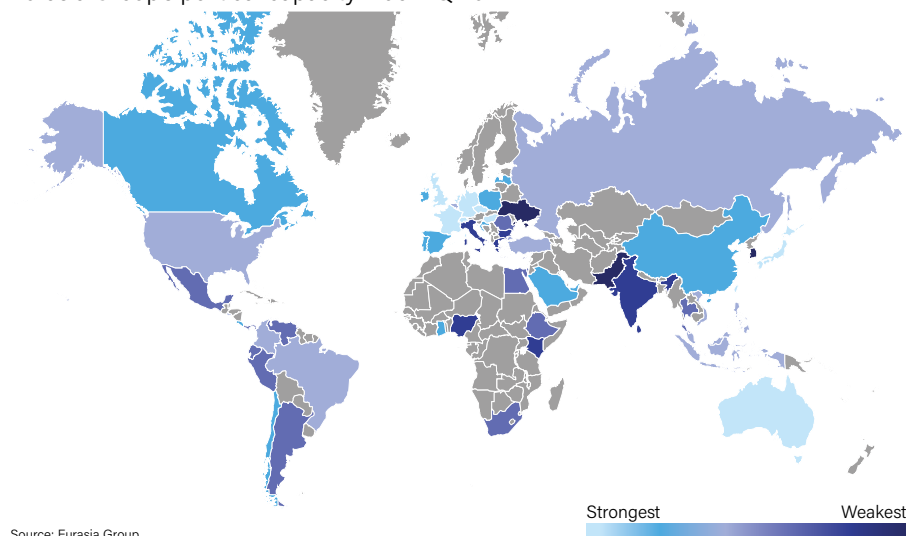




# The state: Shifting identities, changing demands, and new competitors

States will face a range of internal and external challenges over the period through 2030. On the one hand, demands for the services typically provided by states will increase in response to a variety of economic, political, and environmental dislocations. Many traditional states, however, likely will struggle in response to these demands. At the same time, the success or failure of growth and development outcomes will be highly conditioned by state capacity. In many states – including those with both high and low capacity – a wide range of non-state and sub-state actors will increasingly compete with states for legitimacy and the ability to deliver services to citizens that traditionally have been reserved for the state. Some states will also see their ability to govern challenged by shifting and in some cases eroding national identities, as declining trust in national institutions and elites results in increased affinity for other identities – along regional, ethnic, racial, religious, and class lines.

Eurasia Group's political capacity index 1Q 2017



Source: Eurasia Group

## Outlook

### Citizens, governments, and changing identities

Two major factors that will determine the relationship between citizens and their governments are state capacity (the ability of governments to provide public goods and services) and state accountability (the extent to which the state apparatus is answerable to citizens). Over the period through 2030, as the global economic environment becomes tougher and states respond to shocks ranging from environmental pressures to labor market disruptions, capacity and accountability will become increasingly determinative of the economic and developmental fate of countries.

Economic and political factors will also influence patterns of identity within states over the forecast period. Identities in some countries become more “national” while in others significant portions of the population may be resistant to acquiring/adopting national identity. In portions of the developed world, identities that are simultaneously sub-national and post-national may take hold.



Successful nation states will be able to mobilize capacity, accountability, and widely-shared economic success (with the ingredients employed to different degrees) as part a broader campaign of “nation building” grounded in tools like education, conscription, communications technology and popular culture. Elsewhere, economic discontent, elite disconnection and a combination of low state capacity and accountability could fuel the rise of oppositional identities grounded either in sub-national or sectarian/religious terms.

## State competitors

As detailed above, demands for greater public goods and services – such as quality education and healthcare, reliable law enforcement, sanitation and infrastructure, privacy and security – are likely to rise into 2030. In this environment, differing – and sometimes insufficient – levels of state capacity mean that different countries will keep up with citizen demands unevenly and, in some cases, not at all. Accordingly, there will be increased scope for non-state and sub-state actors to step in and provide the services of stateness where national governments prove incapable or ideologically unwilling to do so.

Non-state actors fall into two broad categories: non-violent non-state actors, and more violent non-state militant groups. Non-violent non-state actors include individuals and entities such as corporations, NGOs, and wealthy individuals. Examples of non-state militant groups include Hizbullah in southern Lebanon or the Muslim Brotherhood in Egypt. Looking to the future, the first grouping of non-state actors – and specifically technology companies – are likely to become even more important non-state political actors. Beyond the categories of non-state actors, we also highlight sub-state actors such as city and local governments, which are gaining salience.

## Policy interventions and alternate paths

One of the key questions and sources of uncertainty is whether the interactions among capacity, accountability and identity in a world facing dramatic technological and political shifts results in a landscape that is more fractured or one that is more resilient.

Improvements in the provision of basic public goods, and education above all, can increase not just the strength, but also the scope of civil society beyond traditionally-defined communitarian or sectarian identities toward the creation of a broader public sphere. At the other extreme, where capacity and accountability are lacking, or alternately, where populations feel excluded from its benefits, technology offers the scope for the creation of radicalized, purely oppositional identities (as ISIS has recognized). Between these extremes, the goal is to increase capacity and accountability in the face of more acute challenges, while simultaneously dampening conflict where there are competing providers of the same.

## Theme relevance for key geographies and sectors

As demands for goods and services traditionally provided by states rise, state capacity will become an increasingly salient determinant of a wide variety of growth and development outcomes.

## Regional relevance

**US and Europe:** For the US and Europe, the shifting nature of national identities will be particularly salient. The developed world in particular is perhaps especially likely to develop identities that are simultaneously sub-national and in some cases (particularly in large cities like London and the northeast and west coasts of the US) post-national. These divergent identities will create a more unstable political environment and a high degree of political polarization which, in turn, will make it difficult to generate consensus within areas traditionally used by states to develop and consolidate national identity, such as education.



**Africa:** Africa’s traditionally more stable states will face increasing demands for inclusion in the political process. Demands for greater local resource allocation and power will grow, requiring significant reform to government institutions and public financial management. In general, many political parties in sub-Saharan Africa have focused on patronage and self-preservation rather than on improving state capacity. The inability of some states to effectively deliver will frustrate a younger population, and the absence of credible opposition will turn the populace against the state rather than corral support around opposition parties.

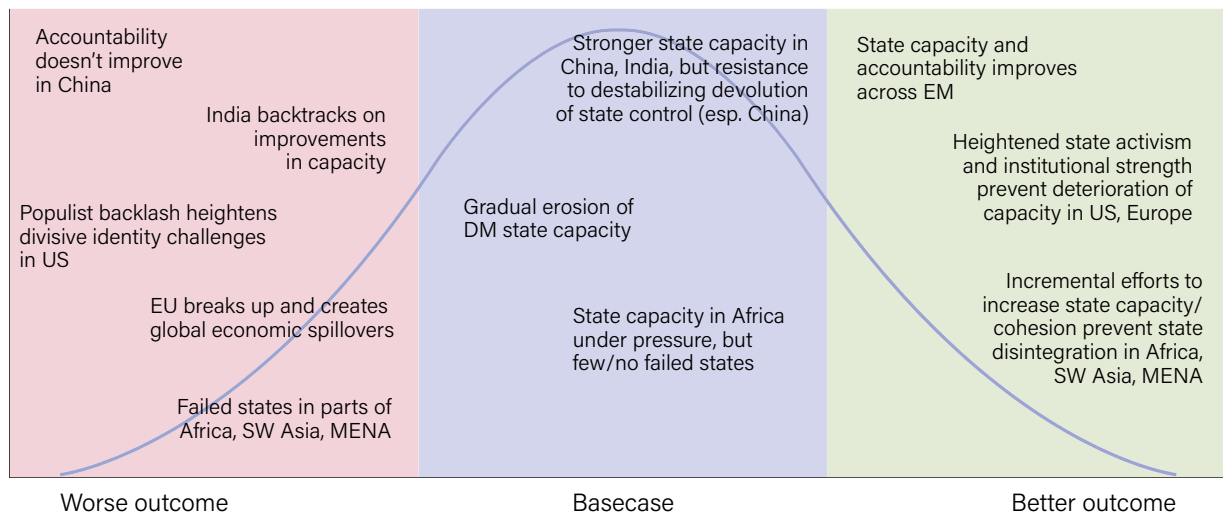
**Asia:** Through 2030 the Indian state system will likely become less centralized. States and cities will enjoy a greater share of total tax revenue and enjoy more authority over day to day policy decisions. Urbanization will also help drive the demand for greater local-level autonomy. Improved state capacity, particularly at the municipal level, will help improve education and health outcomes, and the national government will continue to allow large scope for the private sector in service delivery. In China, though the country maintains a high level of state capacity, there are important regional differences. The unequal allocation of resources between developed regions on the coast and inland provinces will continue to be a driver of popular unrest, especially in China’s ethnic frontiers (Xinjiang, Tibet and Qinghai). However, unlike India, China will approach this issue by increasing the centralization of services instead of increasing localization.

### Sector relevance

**Healthcare:** Typically, a government’s role in healthcare increases alongside national incomes, although the US has long been a notable exception. The current global trajectory may challenge that notion. In a number of large markets globally, policymakers increasingly will find it difficult to reconcile fiscal constraints with heightened demands for healthcare, and will respond by carving out a larger role for non-state actors including the private sector. Going forward, a two-tiered model may gain the most prominence, whereby the state is responsible for guaranteeing a very basic parcel of healthcare services, and looks to private players to supply higher-end care and offerings.

**Education:** Education will present multiple challenges in both the developed and developing worlds over the forecast period, as polities face contentious debates on the purpose, content, funding, and delivery mechanisms of education. These disputes will create space for pluralist systems of educational delivery – with public provision coexisting with private provision, and structured delivery in well-defined institutions co-existing with relatively unstructured delivery.

### Range of outcomes



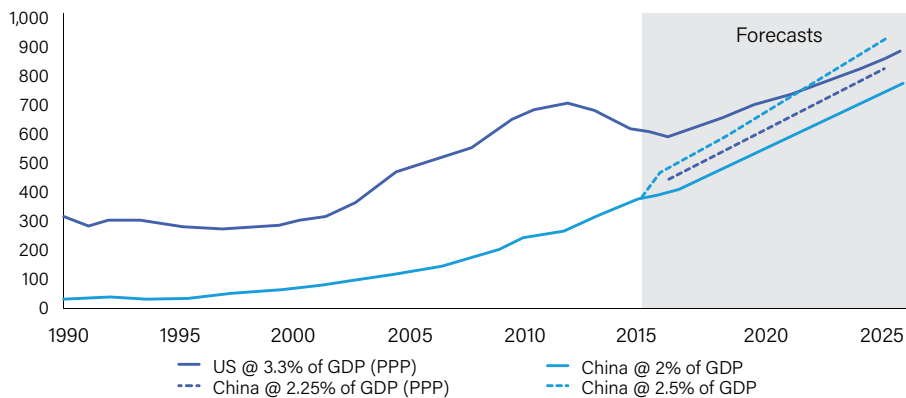
Source: Eurasia Group



# Volatile paths to a multipolar world

The US-led system of global multilateral trade agreements, security alliances, and international financial institutions will weaken through 2030. As the US pulls back from its commitment to global leadership and the EU simultaneously grows preoccupied with various internal and external challenges, China and other emerging powers will gain increased economic and geopolitical opportunities, giving way to a multipolar global system. Though this multipolar world may be more stable, the path to achieve it over the next 15 years will be difficult; it will challenge the existing organization of international financial institutions and aid organizations and the economic, political, and social “values” and rights upheld by this system. This trend will condition the geopolitical environment for the emergence of fat tail risks.

Military expenditure and forecasts (current \$PPP billion)



Sources: IHS, CATO Institute, Department of Defense 2012, Pentagon 2010, Stockholm International Peace Research Institute (SIPRI), Eurasia Group

## Outlook

### Toward a multipolar world

The world’s largest economies are under stress. In this geopolitical environment, increasingly there is no single country or bloc of countries with the political and economic leverage—or the will—to drive a truly international agenda, therefore creating a vacuum of international leadership. In a context of waning US influence, no single state can step in and play the leadership role that the US has since 1945. The EU faces both internal and external challenges, and the limited political capital of European elites is much more likely to be spent on the essential task of deepening European integration to prevent a catastrophic breakup of the Eurozone rather than on spreading or defending North Atlantic liberal ideals. China has economic influence around the world, but its ability and willingness to project hard power – while on the rise – will still focus chiefly within Asia through 2030. Russia will remain influential even in decline, especially in the former USSR and in the Middle East, but it lacks military power, capable allies or broad ideological appeal. Estimates from the OECD suggest that even though India will be the world’s third largest economy in 2030 (roughly the same size as continental Western Europe), it will still only be half as big as China’s economy (the world’s biggest by then), limiting it to a regional power. Brazil will remain only a regional power. The world in 2030 will have multiple global leaders, but it will lack global leadership.



## A multipolar world ultimately can be stable, but the transition to multipolarity will be volatile

The “balance of power” concept implies a correlation between the number of international actors (or great powers) and the stability of the geopolitical environment. In a multipolar world, traditional international relations theory expects that the frequency and intensity of conflict should diminish, that no single nation should become dominant, and that most nations should continue to survive.

A more multipolar world may ultimately be a stable one, but the transition to that order – which likely will occur over the period through 2030 – will entail a range of geopolitical, economic, and security challenges. Beyond the broader questions of war, peace, and cold or hot variations of the same, global institutions whose leadership structure and power no longer reflect global realities – such as the UN, WTO and Bretton Woods institutions – will be less effective and ultimately will change or cede to new ones. Many NGOs that monitor emerging states’ compliance with Western liberal values, including civil society and human rights, will lose influence and freedom to operate as their principal sponsors in the industrial world back away from global commitments. And as global norms on trade and capital flows recede, governments will use market access, currency policy, capital controls, and other tools to shape the commercial landscape within their borders and across the regions they influence.

## Policy interventions and alternate paths

There are several possible paths and policy reactions that could result in a wider range of outcomes. First is the evolution of political attitudes toward global leadership within the US, which may change over the forecast period. Future US elections could bring to power an electoral coalition that is more supportive of both globalization and, by extension, a more active global leadership role. Second is the role of China. China’s global influence will rise but likely remain constrained over the forecast period, but that could potentially change depending on strategic decisions made by China’s leadership. Third, there will be even greater concern about those parts of the world where regional powers are too weak and/or too divided among themselves to engage in financial, political or humanitarian interventions or cooperate in stabilizing or building cooperative multilateral institutions. The regions that are most at risk from such an outcome are South-Western Asia, the Middle-East, and Western/Southern Africa.

## Theme relevance for key geographies and sectors

The potentially volatile transition toward a more multilateral global system will transform the operating environment for all organizations operating internationally, for a number of reasons. First, traditional global institutions that helped establish the postwar order are likely to be less effective, while competing institutions will grow in influence. This suggests a more fragmented global institutional landscape. While more fragmented, the multilateral agenda is also likely to grow more contentious. As a consequence, we can expect intensified conflict on the international stage over issues such as international macroeconomic coordination, financial regulatory reform, trade policy, and climate change. Finally, a global order no longer driven primarily by the US and its allies is less likely to prioritize or even reflect western values, including civil society and human rights.

## Regional relevance

**US and Europe:** In an environment of changing domestic political priorities and reduced ability and will to project global influence, the US will be far less willing to act as leader of a multi-lateral system over the forecast horizon. Similarly, Europe – with governance likely to remain challenged by populist and nationalist movements – will remain inwardly focused, expending energy and re-



sources on rescuing the European project. These developments suggest that, for the major western countries, international development may be less of a priority and see fewer public fiscal resources devoted to it.

**Africa:** African states such as Kenya and Nigeria will seek to diversify their global bilateral relationships in a more multipolar world. However, nationalist policies will likely prevent full integration across regional or continental blocs. At the multilateral level, the IMF will likely continue to be a force for policy change at least within countries, requiring financial support as higher external debt loads and a difficult borrowing environment lead to financing constraints.

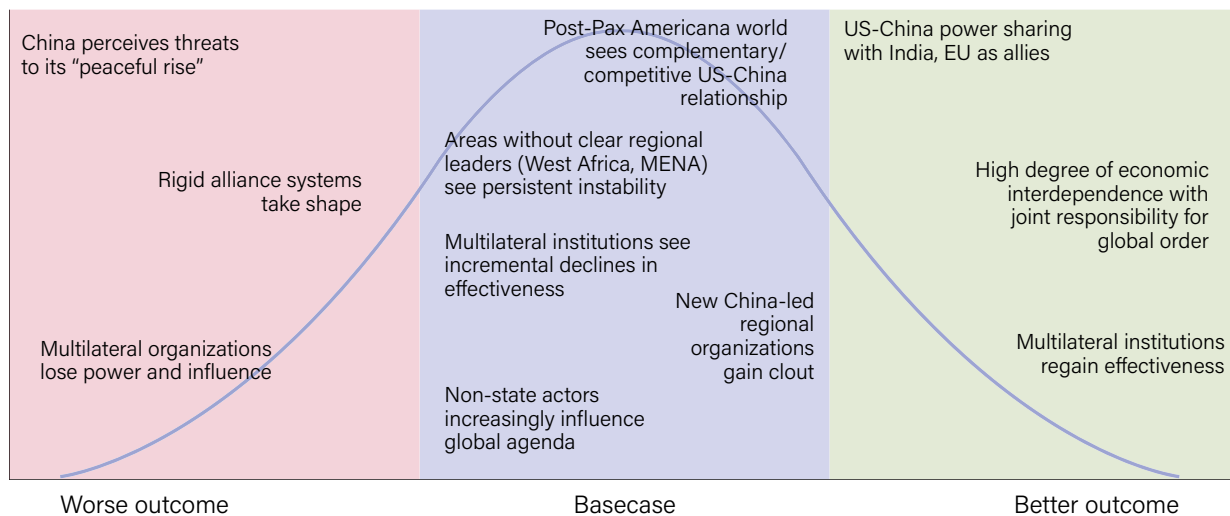
**Asia:** In a multipolar world, India will likely become increasingly self-sufficient in its defense needs, elevate security and economic links with its neighbors and friendly South East Asian countries to act as a counterweight to increasing Chinese influence, become more actively involved in regional financial institutions, and further enhance its relationship with the US. India will increasingly see itself as the regional power and will work to mediate external influence in South Asia on its own terms. China's economic and geopolitical rise will start with China trying to take a leading, and primary, role in Asia. With the death of the TPP, Beijing will redouble its efforts to set the rules of trade in the Asia-Pacific region by promoting the Regional Comprehensive Economic Partnership. China will also try to increase its regional and global economic influence through the One Belt One Road initiative and the Asian Infrastructure Investment Bank.

### Sector relevance

**Healthcare:** Devolution of global governance will complicate global health efforts, and render the largest and most diverse platforms (eg, WHO, G20) less fit for purpose. As traditional supporters pull back from global commitments, these organizations may have fewer financial resources. Moreover, their reputational capital will suffer if they are seen as falling short in tackling acute public health crises and chronic health and development challenges.

**Agriculture:** The agriculture sector is heavily reliant on the system of international trade fostered by globalization. The renegotiation of trade agreements brought about by the development of a multipolar world order, therefore, could have a variety of negative implications for the sector.

### Range of outcomes



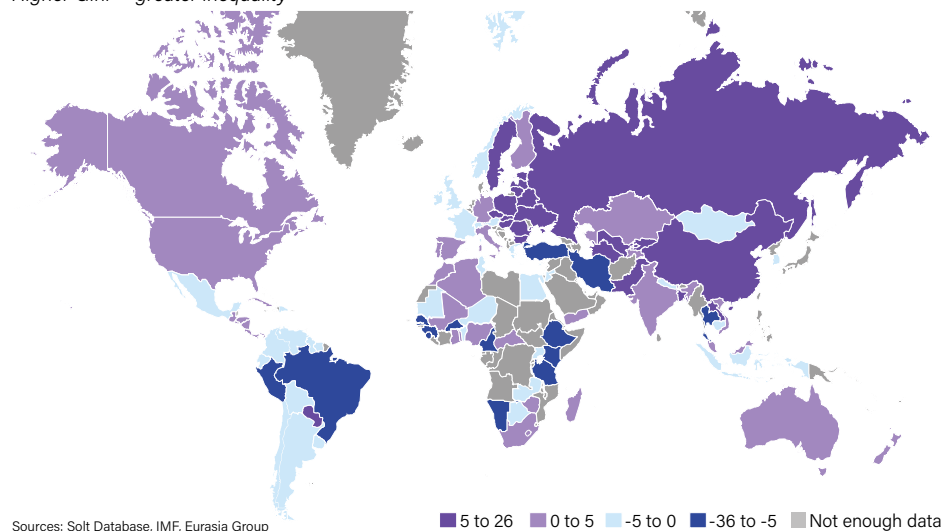
Source: Eurasia Group



# The fraying of the social fabric

Rising income inequality within many industrialized and emerging market countries likely will continue into 2030, potentially undermining social cohesion by buttressing the role of identity, tribalism, and nationalism in the social and political discourse. Over the long-term, rising income inequality within polities will drive decreased political trust and satisfaction, as well as the reconstitution of value systems and the risk of conflict and violent/nonviolent mobilization. This will generate political pressures and create the backdrop for new social contracts to emerge.

Percentage change in Net Gini (1990-2015)  
Higher Gini = greater inequality



## Outlook

### Inequality will continue to grow through 2030

Many factors affect income inequality – migration, urbanization, commodity cycles, female work-force participation, among them. But the primary driver of growing within-country inequality over the next fifteen years will be technological advancements that push a higher share of income to capital than to labor. Government policies, for their part, have historically addressed inequality of outcomes (income and wealth) through redistributive policies, while addressing inequality of opportunities (social origins) through policies that improve education, healthcare and housing. Absent more rigorous policy interventions, we expect inequality to rise through 2030.

### Inequality may eventually yield to new social contracts

While a certain measure of inequality is both inevitable and healthy for a functioning market economy, a deepening perception that high inequality is institutionalized and insurmountable can be very damaging for social and political cohesion. Over the period to 2030, further widening of within-country income inequality risks eroding regime stability in some developed countries. It also will increase risks to government stability in developing and emerging markets, where political systems are more fragile, relative to advanced economies with consolidated democracies. And across nations, regardless of their level of economic development, within-country income inequality will call social contracts into question as perceived needs go unmet and wishes remain unsatisfied.



To avoid erosion of their political legitimacy and stability, governments will be compelled to explore new kinds of social contracts that are appropriate to a world in which technological advancement renders large swathes of the employment landscape either redundant or partly unnecessary. Most models of new social contract involve an expansion of the traditional welfare state, in which unemployment benefits for example go from being a cyclical fallback to being a structural part of people's income.

Many governments are already experimenting through various reforms and initiatives, such as universal basic income, new personal accounts for financial dealings with states and citizens, credits or frameworks for human capital and lifelong learning, rights to care, and new ways of handling everything from personal data to health. This reworking of social contracts will require tremendous state capacity, both to develop and to implement.

## Policy interventions and alternate paths

There is a wide range of potential outcomes influenced by possible policy choices made in response to rising inequality and the renegotiation of social contracts. The first uncertainty regards the degree to which rising inequality creates popular skepticism toward globalization and resistance against political and economic elites. Outcomes here will vary widely from the industrialized democracies (where there is skepticism about both globalization and elites), large emerging market democracies (where there is less skepticism about globalization given perceived benefits but, in many cases, greater resistance to elites), and more authoritarian systems, like China (where there is less skepticism about globalization, and opposition to elites is tightly controlled).

In cases where inequality does result in a fraying of the social fabric, including in the western industrialized democracies where social cohesion has declined and political and other forms of polarization have risen, there also is a considerable range of outcomes stemming from the efficacy of policy responses to these stresses. This will depend in part on state capacity, but also on the broader ability of governments and companies to forge a new social contract with citizens.

## Theme relevance for key geographies and sectors

Over the forecast period, a social fabric that frays because of rising inequality will present a number of challenges for key geographies and sectors. Socially, rising within-country income inequality and its negative impact on social cohesion will foster crime and instability and influence the development of divisive and potentially dangerous social values including racism and xenophobia. Countries experiencing rising income inequality will see increased fragmentation between communities, ethnic groups, regions and social classes, either because income disparities overlay these divisions to begin with, or simply because income inequality erodes social trust more broadly.

Politically, the fraying social fabric will impact states at both the citizen level and at the government level. At the citizen level, the fraying of existing social contracts will influence civic participation (positively for the rich and negatively for the poor), political party positioning, and redistributive preferences. It will influence their value systems and operate as a driver of political movements, both violent and non-violent. A key component of all of these relationships is trust – the trust that citizens have in their governments and in the institutions of the country to provide opportunities and the means for attaining a sustainable livelihood, and to ensure a safe and secure environment for the enhancement of individual wellbeing. As rising income inequality sows distrust, people will increasingly turn away from formal political participation and operate outside of existing institutions, via independent political movements and other informal activities.





## Regional relevance

**US and Europe:** The erosion of social cohesion, and the scramble to develop policy responses to it, are likely to constrain the international agenda and priorities of the US and European countries. In part, this is because higher inequality and the populist political movements it likely will sustain are, in general, skeptical of global commitments. More practically, the policy responses that will move the world’s industrial democracies toward new social contracts are likely to be expensive and push up against fiscal constraints.

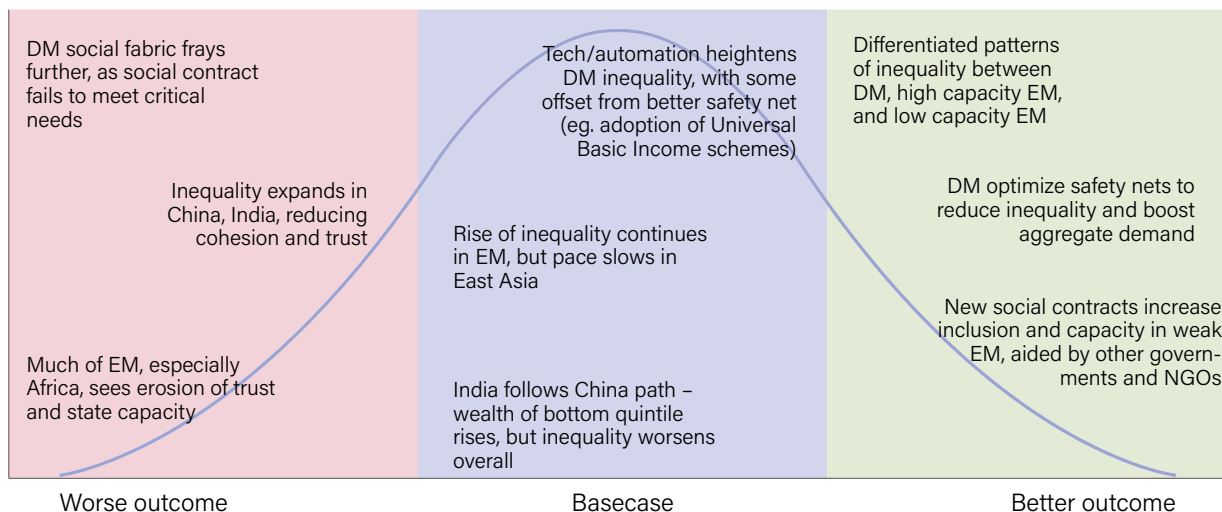
**Africa:** Nigeria and Ethiopia have been historically divided by region, religion and ethnicity; these divisions would be exacerbated by economic shocks, especially if those shocks increase inequality. While in the more globally connected national capitals of these countries, rising education and income levels will help ease these socio-economic and political divides, rural communities will continue to identify locally, rather than nationally.

**Asia:** Historically divided across caste, religious, linguistic, and regional lines, rising levels of education, rising levels of urbanization, rising incomes, and greater mobility and access to technology will help make class divisions much more salient in India by 2030. Class distinctions will become more important, and nationalism will grow. The major risk to this outlook in India is the possibility of worsening divisions along Hindu-Muslim lines. In China, though 700 million people have emerged from poverty over the past three decades, the inequality gap has grown larger between the low-income population, the middle class and new elites, as well as between rural and urban areas. Accordingly, social cohesion will undergo considerable strain in the coming 10-15 years, giving way to an updated social contract.

## Sector relevance

**Education:** The fraying of the social fabric over the forecast period will put greater pressure on the education sector as a core component of the social contract between governments, corporations, and citizens. The main vector through which inequality influences an individual’s ability to accumulate physical and human capital is education. Over the next fifteen years, increasing inequality within some countries will drive under-investment in children’s education. This relationship will be exacerbated by the likelihood of inter-generational educational persistence.

## Range of outcomes



Source: Eurasia Group

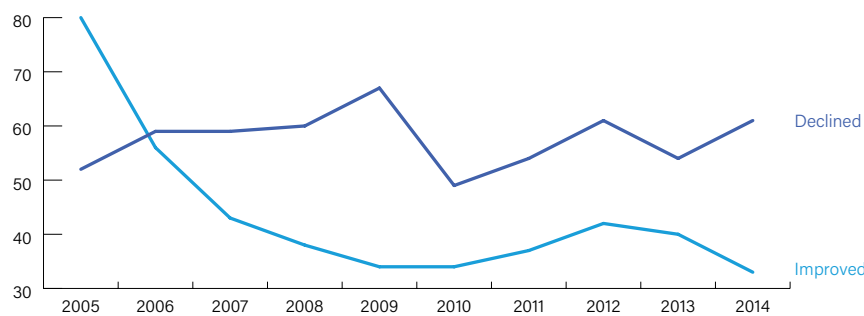


# The erosion of liberal values

Over the next fifteen years, support for traditional liberal values is vulnerable to erosion in key countries across the globe. This will be evident in three areas: 1) a decline in support for economic liberalism; 2) a decline in support for democratic institutions; 3) and shifting attitudes toward social liberalism. In this context, social media will exacerbate the deterioration of liberal values, insofar as democratic institutions rely on a certain level of consensus about what constitutes an authoritative source of information. Through 2030, these factors may, in many key countries, operate in conjunction to produce more tolerance for illiberal and authoritarian forms of governance.

Number of countries with declines in freedom outnumbered those with gains since 2005

Number of countries



Sources: Freedom House, Eurasia Group

## Outlook

### Decline in support for liberal values unlikely to reverse

In the industrialized democracies of Europe and the United States, popular support for democracy and the traditional values of economic and political liberalism is in decline. Moreover, the likely set of future economic, social, and geopolitical trends suggests that the observed decline in liberal values in industrialized and emerging countries likely will persist through 2030. There are two components to this phenomenon, both of which affect the resilience of democratic institutions and the liberal political ideas that underpin their functioning.

The first is declining participation in the institutions of democracy – political parties, elections, or civil society organizations. The more troubling aspect, from the perspective of democratic values, is the second component: a broad and consistent deterioration in levels of support for the values that underpin democracy – such as freedom of speech and association, individual liberty and minority rights – and a corresponding uptick in receptivity towards authoritarian or repressive forms of government. This is particularly concerning among the millennial generation in the developed world, which is displaying higher levels of skepticism towards democratic principles, when compared both to older adults and to similar generational cohorts in earlier periods.

These trends have been underway for many years, and have advanced through the election of both left wing and right wing governments in the United States and major European economies. The recent rise of right wing populism, therefore, likely has less to do with democratic disillusionment than it does with globalization’s decades-long economic and cultural marginalization of sizable electoral minorities that finally felt their power in 2016. These forces have brought to power leaders who oppose economic liberalism (globalization) and social liberalism (progres-



sive agendas) in a political register that also poses a challenge to accepted democratic norms of political liberalism. Declining support for democratic institutions and ideals in the industrialized world is occurring in a larger global context of democratic exhaustion and erosion. According to Freedom House, over the past ten years more than one hundred countries have suffered a net decline in democratic indicators, while just 61 have enjoyed gains.

## The role of social media

Social media plays a central role in contemporary political discourse and organization, but the increasing penetration of social media platforms does not in principle favor liberal or illiberal groups as such. What can be said, however, is that within industrialized democracies, the right-wing populist insurgency against a liberal establishment is currently reaping the most substantial gains from social media's inherently anti-establishment features – the radical democratization of content consumption and creation that can easily blur lines between authoritative accounts' politicized interpretations and, in extremis, “fake news” hoaxes. Insofar as democratic institutions rely on a certain level of consensus about what constitutes an authoritative source of information, social media is likely to pose a continuing challenge to traditional forms of democratic organization and liberal political values.

## What these trends mean for the future of governance

The ascent of populist and illiberal movements in the US and Europe will have an impact on the nature of governance in these regions – or more specifically, on the expectations and ideals that will frame policy and public debate in the coming years. The welfare of national citizens – and within that, the citizens who until now have been the biggest losers from globalization – will increasingly take center stage, and in response to the economic and cultural grievances of these people, governments are more likely to adopt avowedly anti-globalist and anti-progressive agendas.

## Policy interventions and alternate paths

Policy changes that might revive faith in liberal democratic institutions would include a turn towards increased federalism in the large Western democracies – on either fiscal or cultural issues. On this score, technology could play a role if and as it provides pathways for more direct participation in democratic processes.

It is also possible that the erosion of support for liberal values – and the increasing receptivity to authoritarian ones – has in part to do with a certain historic apathy on the part of a generation that, in its lifetime, has encountered neither a real test of democracy nor a true taste of authoritarianism. On this view, the emergence of real political illiberalism may in fact galvanize a response that invigorates the commitment to liberal values.

Technology threatens to exacerbate the erosion of liberal values in two ways: First, the basic epistemological and editorial challenges that social media has posed to factual authority will persist and likely deepen. Second, as automation and AI eat through higher and broader areas of employment, the socioeconomic dislocations may prompt people to prioritize economic security over political or social liberalism.

## Theme relevance for key geographies and sectors

As belief in the supremacy of liberal institutions withers among developed-world populations, there will be less pressure on governments to support the spread of those values abroad, particularly in parts of the developing world where they are more fragile. As a result, governments in Asia and Africa may feel more leeway to repress or sidestep increasing demands for liberal values coming from their own populations.



## Regional relevance

**US and Europe:** The erosion of liberal values in the western industrialized democracies suggests declining willingness to promote these values globally through multilateral organizations, through support of NGOs and other organizations that implicitly and explicitly monitor and defend liberal values, and through unilateral actions including military intervention and other attempts at nation building or overt promotion of democratic values.

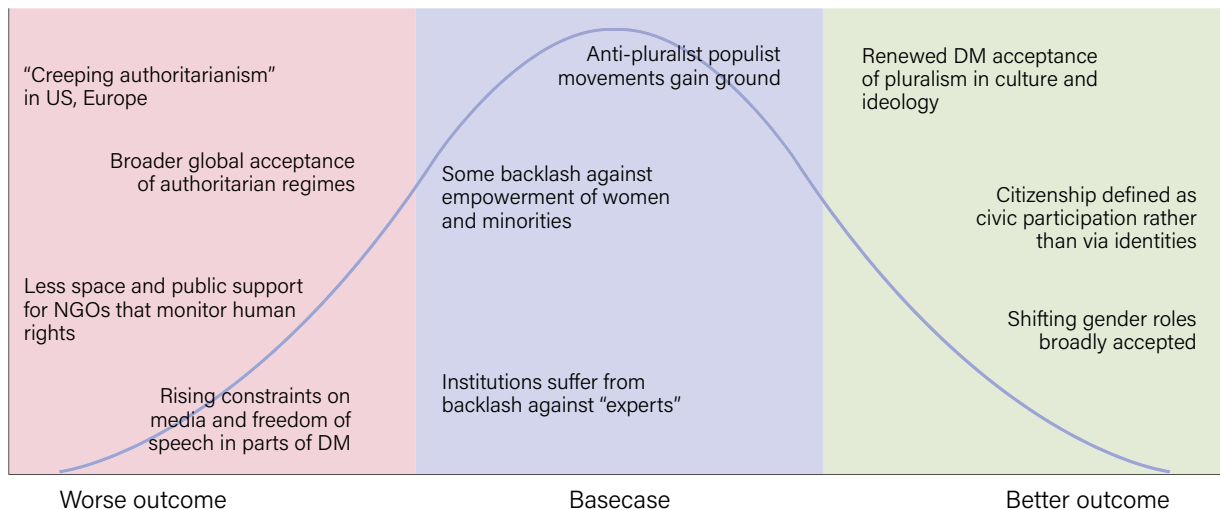
**Africa:** Ethiopians and Nigerians will likely push for a greater commitment to representative governments and free and fair elections while their governments resist, especially in the case of Ethiopia. Citizen demands for liberal values in Ethiopia will likely grow as the ruling party seeks to stem the rise of a coordinated opposition movement. Amid this climate, greater scrutiny will be placed on NGOs perceived to be supporting civil society initiatives to make the government more representative. In Nigeria, the media and NGOs will continue to be given relatively more space than their Ethiopian counterparts.

**Asia:** Indians are likely to remain deeply committed to existing democratic institutions. But classical liberal values such as free speech have always faced constraints, and these constraints will grow given the likelihood that nationalism increasingly becomes a force in Indian political life. In China, as per capita income rises, a larger and wealthier middle class will increasingly demand a more transparent and responsive government over the forecast period. So long as the government is able to meet this demand, calls for outright democracy are likely to remain fairly muted. Over the forecast period, the Chinese government will encourage a broadly conservative attitude toward political liberties and political order in order to ensure regime survival. It will likely promote a skepticism of civil liberties, however, that could lead to political instability and will strongly oppose ambitions for ethnic minorities to achieve political or cultural autonomy.

## Sector relevance

**Education:** Insofar as education serves not only to functionally prepare students for certain kinds of employment but also to inculcate certain basic societal values, education policy may emerge as a flashpoint in debates about what kinds of values are appropriate to introduce in the classroom. At the same time, if economic dislocation is seen as a contributor to acceptance of authoritarian values (in exchange for promises of economic security) then a renewed focus on increasing the functional relevance and impact of education will be a key consideration.

## Range of outcomes



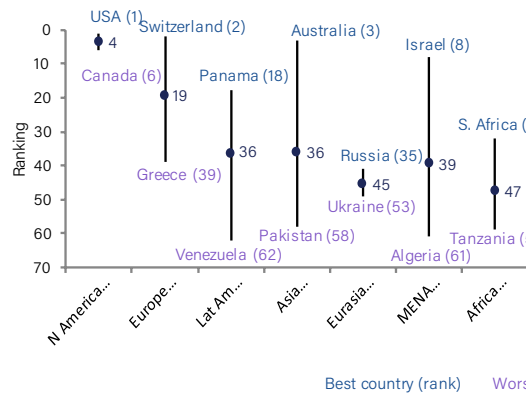
Source: Eurasia Group



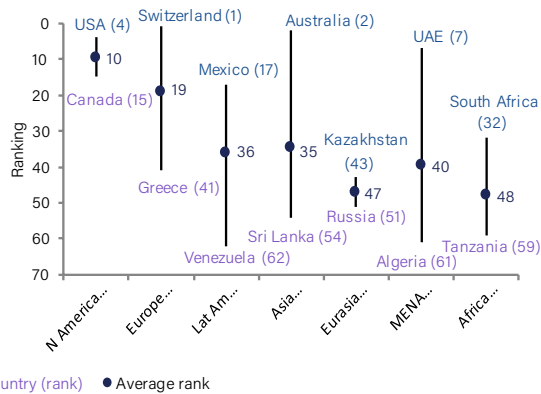
# Science, technology, and the changing nature of human interaction

The pace of innovation will continue to accelerate globally, largely driven by scientific breakthroughs and technological advances, in particular in digitization, material sciences, and biotechnology. This rapid pace of technological development will continue to drive unprecedented and often disruptive economic, social, and political changes. Over the next fifteen years, these developments have the potential to fundamentally change how individuals relate to their environment, their relationship with (intelligent) machines, and their ways of organizing. For these changes to have real impact, certain levels of interoperability, regulatory progress, and ethical structures will need to be in place. While the effects of technological change will be largely positive, there will be a number of more negative externalities that take shape and will have to be managed.

Current state of innovation index, rankings by region



Future innovation policy index, rankings by region



Source: Eurasia Group

## Outlook

### The acceleration of innovation

The pace of innovation has been increasing globally, driven largely by the acceleration of scientific insight generation and technological development over the last fifty years. Importantly, rates of technological adoption are also increasing. Over the next fifteen years, the changes wrought by science and technology will fundamentally influence the relationship of individuals to their environment, their relationship with machines, and their ways of organizing. These changes are, of course, dependent on a socio-political environment that supports human capital development, entrepreneurship, financing access, macroeconomic stability, and public sector investment to support research and development in digitization, materials science, and biotechnology.

### The changing nature of human interaction

First, technological change and its adoption are driving innovations that will affect humans' relationship with the environment – by influencing the genetic code of species, the energy harnessed to power daily life, and the natural habitats in which we live. Second, technological change will rapidly alter humans' relationship with (intelligent) machines. It will enable them to extend their intelligence, shift



their transportation patterns, create new objects, and engage in new forms of learning. And finally, technological change will influence human ways of organizing, leading to radical disintermediation.

The technological innovations enabling such changes can be unpacked into three buckets: 1) digitization; 2) materials sciences; and 3) biotechnology. And each of these areas is only possible with the availability of capital financing. Moreover, for the technology-enabled changes elaborated above to be realized in society, three features of the socio-economic and political environment must be in place: 1) interoperability; 2) regulatory change; and 3) ethical structures.

## Policy interventions and alternate paths

Population growth, the rise of automation, and less certain global economic conditions have refocused policymakers' attention on the need for countries to embrace and implement policies that promote innovation. These policies are critical for long-term economic growth potential, especially in countries with high demographic vulnerability. Population growth no longer necessarily supports economic growth: In an age of rapid technological evolution, countries must harness innovation to generate employment, create new industries, and enhance productivity.

In order for innovation to be supported comprehensively and for the above-elaborated theme to be realized, a number of policy measures must be in place at the country-level. First, governments in both developed and developing countries must support the development of human capital among young people. Second, a healthy environment for entrepreneurship is critical. Next, policies must ensure financing access for new and small innovative firms. In the forecasted environment of low-growth, policies to support country-level macroeconomic stability will help to reduce uncertainty, thereby encouraging innovative risk-taking. Openness to international trade and investment will also foster competition, which in turn will encourage innovation and help disseminate knowledge across borders. And finally, government entities will have the option to embrace certain innovative initiatives that private firms are more likely to avoid because of long time horizons and the lack of marketable near-term results. In this environment, governments should help finance research institutions and invest in both physical infrastructure and in the expansion of information and communication technologies via data sharing.

## Theme relevance for key geographies and sectors

### Regional relevance

**US and Europe:** Rising protectionism and regulatory fragmentation within the US and Europe will result in rolling crises that challenge the environment for innovation and technological development. Moreover, greater automation and AI use in specific sectors will force governments and corporations to engage in serious dialogue on how to manage labor market displacements.

**Asia:** The Chinese government is pursuing a strategy for building the country into a cyber superpower. Beijing is pushing its IT industry to develop indigenous hardware and software products, particularly for government organizations. Beyond its production of hardware and software, China is also becoming a critical source of demand for new innovations. These developments will put western firms at a disadvantage. Outside of China, India functions as one of the world's most critical IT hubs, and innovation is a key policy objective of the BJP government. The Indian government understands that a return to more rapid economic growth requires a host of liberalizing reforms that it is championing, however risks surrounding security and intellectual property rights will continue to hinder innovation. In both India and China, the shortage of qualified software engineers and cyber savvy regulators could impact the deployment of AI capabilities and cybersecurity-related legal issues.

**Africa:** Weak property rights, poor technical manpower, and insufficient infrastructure challenge Africa's innovation environment. Moreover, a lack of integration of entrepreneurs into the

formal economy means that formal investment in innovation is difficult. Through 2030, however, sub-Saharan Africa will become more populous, youthful, urban, mobile, and networked. The forecasted low growth environment will, therefore, put a premium on science and technology to generate greater productivity and economic growth at the country-level. In this context, sub-Saharan Africa's weak governance environment, ironically, will serve as a key enabler of innovation, owing to the lack of regulation and bureaucracy that enables engineers and entrepreneurs to have greater space for experimentation.

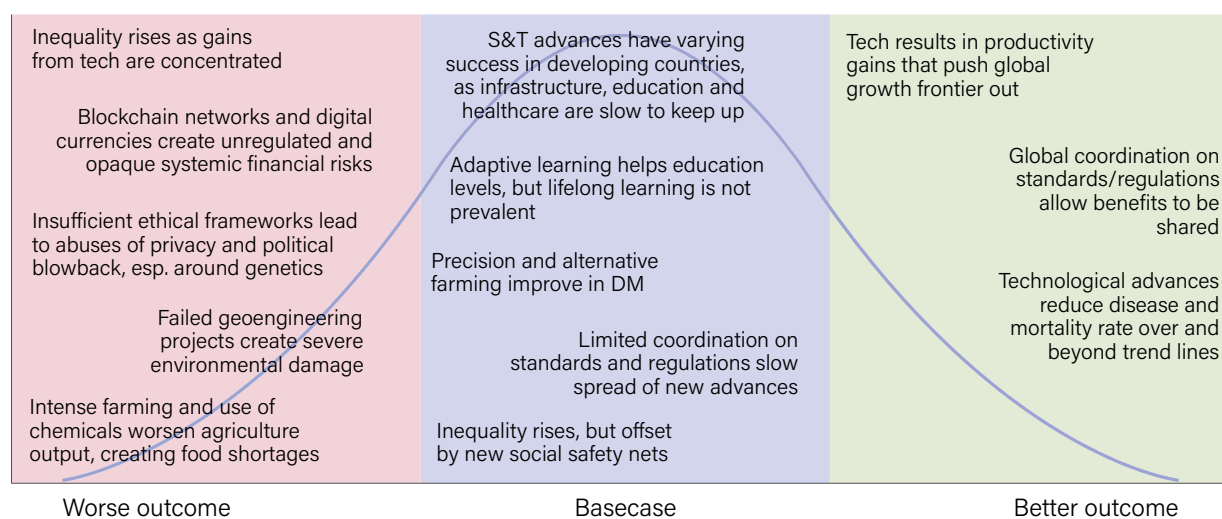
## Sector relevance

**Healthcare:** Over the past century, the health sector has undergone a massive transformation based on increased scientific understanding and technological developments. The rate of change and understanding is continuing to increase exponentially. Biotechnologies are at an inflection point and over the next 10-15 years, we expect advances to truly transform human health including longevity.

**Education:** The education sector has been positively impacted by technological advances, especially in post-secondary education. Technology will continue to impact both faculty, students, infrastructure and processes, addressing issues such as the cost of learning (not just in financial terms, but also in time) and enabling more modular approaches to education.

**Agriculture:** The agriculture sector has seen the application of science and technology advances in every part of the value chain, in an effort to reduce costs, improve efficiencies and enhance productivity. The superior access to capital and technological advances in developed countries will continue to drive farming into the realms of manufacturing operations, where every last ounce of efficiency is taken from land and technology. Developing countries could leap-frog into the future of agriculture (as they did with telephony, widely adopting mobile over fixed lines) if they receive adequate funding, government support and if the required infrastructure is in place.

## Range of outcomes



Source: Eurasia Group

London New York San Francisco São Paulo Singapore Tokyo Washington D.C.

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