CRITICAL DECISION POINTS
Facing Government Leaders in a Transforming World

IN COLLABORATION WITH
KEARNEY
National Transformations Institute
CRITICAL DECISION POINTS

Decision points are junctures in space and time, identified during the planning process, where it is anticipated that leadership must make a decision concerning a specific course of action. In 2022, four categories of decision points will be particularly critical for government leaders.

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* https://www.cambridge.org/core/books/abs/command/decision-point/F7275E56F935E86DD0A5B0C98C3B69567
We are at the precipice of change; the challenges of this moment are unprecedented, and how governments withstand the trials and tribulations of 2022, will shape our future for decades to come.

In 2021 the global community began to curtail the human toll and the economic disruption of the COVID-19 virus. The challenge of the global pandemic inspired an impressive response from governments, researchers, and regular citizens worldwide. Through bold economic measures we avoided a possible depression, through focused research new vaccines were developed, and by coming together communities around the world took the necessary steps to stem and control the pandemic.

As we begin to end the pandemic, our world is still transforming. While the global impetus to build back better towards a more resilient, more connected, and more hopeful future is palpable, we also see new international conflicts playing out even as old tensions continue to vex many parts of the world. The world economy remains fragile, and our planet and ecosystem remain on a dangerous course.

This challenging backdrop demands resourceful, coordinated, and decisive action to recover the peace and prosperity we need to build a better future. The stakes are high across the major areas of our collective life. Governments must take critical decisions much faster and together – as leaders, we must strive for the common good and peace even as we navigate confrontation.

The World Government Summit Organization’s report – “Critical Decision Points Facing Government Leaders in a Transforming World” – takes a broad look at the many-hued challenges we face as a global community. The report details the opportunities and risks that come from new technologies, the possibilities and pitfalls of economic change, and the enduring importance of building responsive and resilient systems and government institutions.

Even in the face of the turbulence that comes with change, by working together in the spirit of cooperation we can combine our knowledge and experience to strengthen and renew our world. Our children and future generations will inherit the conditions we create – our cooperation and judgement today can secure their peace and prosperity tomorrow.

H.E. MOHAMMAD AL GERGAWI
MINISTER OF CABINET AFFAIRS OF THE UNITED ARAB EMIRATES
CHAIRMAN OF THE WORLD GOVERNMENT SUMMIT ORGANIZATION
INTRODUCTION

In the critical juncture the world has entered, governments face a radically altered landscape of uncertainty featuring challenges and opportunities that are not just unfamiliar, but in many cases structurally novel. The world we have entered does not just feel different – it is different.

For government leaders, this emerging landscape presents a range of critical decision points. These include contingencies to prepare for; chasms of perspective to bridge; non-traditional threats to preempt, disruptive policy instruments and strategies to leverage; new actors to engage – and across all of these, opportunities for strategic innovation to seize.

By anticipating these critical decision points and taking action on them early in their evolution, government leaders can create strategic advantage, strengthen resilience, and accelerate progress in the turbulent chapter in our history that we have now so clearly entered.
22 CRITICAL DECISION POINTS
FACING GOVERNMENT LEADERS
IN A TRANSFORMING WORLD
Strategic Shocks are potential high-impact events for which contingency plans are vital to ensuring readiness.
Policymakers around the world now face a classic dilemma: how to contain rising inflation without derailing strong employment growth. In response to the devastating economic shock of the COVID-19 pandemic, many of the world’s leading economies unleashed unprecedented but necessary monetary and fiscal stimulus. However, in their desire to not repeat the errors of an inadequate response to the global financial crisis, policymakers delivered stimulus on a scale that exceeded the demand shock that it was intended to address, contributing to inflationary pressures arising elsewhere in the economy. Inflation is rightly called the “cruelest tax” because of the disproportionate economic pain it inflicts on low-income people. Supply-chain constraints and the resurgence of geopolitical volatility have made this worse by spiking commodity prices. Together these forces have unleashed accelerating inflation, even while economic recovery continues to be inconsistent and sector-dependent.

For government leaders, the conflicting imperatives of maintaining price stability while sustaining healthy employment and economic growth – a challenge reminiscent of the stagflation that characterized the 1970’s – represents an extremely difficult problem that demands a carefully engineered set of policy actions that are targeted, complementary, and precisely timed.
A Harvard study estimated the US employment shortfall relative to the pre-pandemic trend to be **7.3 million**.¹ In absolute terms, the US labor market is still short of its pre-pandemic peak by about **2.1 million** jobs.²

Eurozone inflation accelerated to **5.8%** in February 2022, before geopolitical risk introduced additional commodity-related price volatility in early March.³

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¹ [https://www.nber.org/papers/w29739](https://www.nber.org/papers/w29739)
² [https://www.usatoday.com/story/money/2022/03/04/jobs-report-february-unemployment-rate/9368885002/]
³ [https://www.politico.eu/article/eurozone-inflation-hits-record-of-5-8-percent/]
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to design their policy mix to tame inflation without sparking a severe economic contraction. The central issue is that the monetary and fiscal tightening required to slow inflation may also derail growth in economic sectors still recovering from the COVID recession. Failing to address inflation may de-anchor market expectations, which – coupled with commodity-price spikes – will create a high risk of stagflation. That combination of recession and inflation would be a much more serious economic challenge that cannot be overcome without significant and painful policy action.

An integrated approach to monetary and fiscal policy will be essential to balancing price stability and economic growth. While monetary tightening will be crucial for anchoring demand, policymakers will need to design and employ a range of sector-specific actions to both ease supply constraints and aid disrupted economic sectors. These actions will necessarily be country-specific, as the economic context will vary depending on underlying GDP-growth and inflation rates; national financial buffers; and debt loads.

Some of the most effective government actions will center on expanding the economy’s capacity, for example, by reducing labor-market friction through targeted programs, and by making immediate investments in supply-chain and logistics nodes. Such policies not only help alleviate supply constraints, but they also help firms expand and grow, providing an added cushion against economic stalling amid future monetary tightening.

THE COMBINATION OF RECESSSION AND INFLATION WOULD BE A MUCH MORE SERIOUS ECONOMIC CHALLENGE THAT CANNOT BE OVERCOME WITHOUT SIGNIFICANT AND PAINFUL POLICY ACTION
Rapid, Forced Migration on a Massive Scale

In the first two weeks following the start of the Russia-Ukraine conflict, 2.6 million Ukrainians fled their country – the fastest-growing refugee crisis in Europe since the Second World War, according to the UN’s High Commissioner for Refugees. This is in addition to some 82.4 million forcibly displaced people across the globe. Despite this staggering number, the tragic reality is that the myriad factors that give rise to forced displacement – including war, political instability, food insecurity, and extreme-weather disasters, among others – are likely to deepen in severity and rise in frequency in the near and medium term.

The speed and scale of the onset of the Ukrainian crisis illustrates the immediacy of the challenge. For government leaders, the adaptive and absorptive capacities of their countries – in economic, social, and political terms – must be preemptively assessed and proactively strengthened to enable readiness for any range of triggers that may set off a migration cascade.

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5 https://twitter.com/Refugees/status/1500822336572088201
### Key Data Points

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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| 73%        | 73% of forcibly displaced people are hosted in neighboring countries.  
[7](https://www.unhcr.org/figures-at-a-glance.html) |
| 86%        | 86% are hosted in developing countries.  
[8](https://www.unhcr.org/figures-at-a-glance.html) |

### The World’s Top Refugee Host Countries

- **Germany**: 1.1M
- **Sudan**: 1M
- **Pakistan**: 1.4M
- **Iran**: 979K

Amnesty International

CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to prepare for the coming migration cascades to which they may be exposed and how to most effectively absorb the number of displaced individuals they judge themselves capable of taking in. A recent history of economic anxiety and nationalistic angst have put populations on edge with respect to large inflows of refugees, yet absorbing these individuals is not only the humane policy choice, but can also be a positive one for national growth and prosperity. Refugees hold and create jobs, generate additional demand in the economy, and contribute to the country through payment of taxes. One study found that in the EU, each euro invested in refugee support programs produced two euros of return in economic benefits.  

Government leaders thus face the challenge of balancing the near-term economic costs of refugees with the potential longer-term boon they may provide the economy – and this balancing act must often take place in the context of extremely challenging social dynamics. Failure to proactively consider the economic dimensions of refugee inflows and societal fissures that may become inflamed with the addition of a new population may lead to unsustainable economic burdens; rising vitriol in political discourse; and even violence between citizens and refugees.

As government leaders evaluate their capacities to take in new refugees, they must first assess their exposure. One source of exposure is vulnerable neighbors – those with elevated risk of climate crisis, political violence, or aggression from adversaries. A second, more subversive source of exposure is adversarial neighbors who may seek to apply so-called “weapons of mass migration,” directing displaced persons toward an adversary’s borders with the specific intent to sow unrest. In addition to understanding the potential volume of a migration cascade, leaders must also assess their own domestic dynamics: what economic anxieties, ethnic or religious tensions, or political polarizations might be inflamed by the sudden appearance of a new population? With an understanding of these factors, leaders can seek out ways to pre-emptively address fissures in their social fabric; identify requirements for successful migrant integration (e.g., language training, housing availability); and identify opportunities for migrants to contribute meaningfully to the economic well-being and growth of the nation.

10https://www.belfercenter.org/publication/weapons-mass-migration-forced-displacement-coercion-and-foreign-policy
ENERGY CHAOS: DEEPENING RESILIENCE IN AN INCREASINGLY UNSTABLE ENVIRONMENT

A FRACTURING ENERGY WORLD ORDER

The global energy environment is at an apex of uncertainty. Deep, interdependent, energy relationships between nations are growing increasingly strained in the face of conflict, natural-resource scarcity, alternative-energy competition, and the existential threat of man-made climate change. Yet global energy consumption is forecast to increase by 50 percent across all primary energy sources by 2050.11

The current context demonstrates the complexity of the existing world energy order – and its perils. For government leaders, the uncertainty of the energy environment requires urgent action to both secure near-term energy security while also building resilience for the long-term, given the long investment horizons and unequal distribution of energy sources.

11 https://www.eia.gov/outlooks/ieo/consumption/sub-topic-01.php
83 countries globally are crude oil importers. Within the 38 OECD countries, only Norway, Canada, and Australia are net exporters of energy.

In recent years, energy prices have been – and are forecast to remain – highly volatile as a result of shifts in demand, political instability, technological advances in renewables, and fluctuating exchange rates.

Footnote #1: US Energy Information Administration  
[https://www.eia.gov/outlooks/ieo/consumption/sub-topic-01.php – footnote #1]
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to most robustly position their countries with respect to energy security in the context of increasing geopolitical volatility. The central issue is that the instability of the global energy environment demands near-term action that may undermine future resilience in favor of immediate security. If nations fail to take decisive action to ensure energy security in the near term, they will leave their citizens and economies vulnerable to energy shortages or record-level energy prices. However, should they enact short-sighted policies that fail to appreciate both the certain and uncertain aspects of the future global energy environment, they may face similar shortages in future crises; place themselves at risk of being taken hostage by a key energy supplier; or be forced to grapple more meaningfully with the related but independently perilous threat of the diverse impacts of climate change.

Nations face challenges both unique and universal with respect to energy supply: a changing energy mix; potentially challenging geographic location; varying abilities to utilize technology; restricted financial capabilities; differing paces of socio-economic development; dependency on fossil energies; changing international relationships; and more. Therefore, each nation requires a unique energy agenda, considering current energy consumption as well as commitments toward combating climate change. Domestic production and energy-technology innovation are essential, yet history has shown that energy independence carries its own risks and challenges – international engagement will remain a central pillar of energy security. Beyond diversifying and balancing relationships in international trade, nations can enhance energy resilience with partnerships that integrate energy infrastructure, exchange technology, and accelerate investment in strategic industries. The chaotic state of the energy environment demands an approach to energy security that balances an entire portfolio of relationships and resources, ensuring resilience with respect to strategic shocks while investing in future readiness.
FOOD NATIONALISM: PREPARING FOR AND PREVENTING A GLOBAL SPIRAL OF FOOD INSECURITY

4 THE MOST PROVEN SOURCE OF SOCIO-POLITICAL INSTABILITY

Even prior to the COVID-19, food insecurity was on the rise. The pandemic and a weak harvest in Latin America exacerbated the challenge. Now, however, in the context of the war in Ukraine, the threat of destabilizing food insecurity and scarcity on a global scale is set to intensify to levels not seen in centuries. This is a function of the convergence of multiple factors. First, Ukraine is a major exporter of wheat, barley, rye, and corn. Not only is the conflict there halting current production and shipments, but it is also disrupting the spring seeding season, resulting in longer-term shortfalls. Russia is also a leading exporter of agricultural commodities.

In 2021, Russia, Ukraine, or both, ranked among the top three global exporters of wheat and maize, among other agricultural commodities. Sanctions have not directly targeted the agriculture sector as of this writing, but Russia has already preemptively reduced export quotas. Perhaps most importantly, the political power of food inflation is well-known. From the Bolshevik Revolution to the recent protests in Peru, food-price spikes are among the most empirically validated sources of sociopolitical instability. As a result, given unprecedented sanctions, the likelihood of food inflation being used as an instrument of geopolitical influence is extremely high. In this environment, there is risk that other food-producing nations may reduce exports to ensure domestic price stability. Such rising food nationalism would result in a potentially catastrophic cascade of food insecurity and commodity price inflation.

+20.7% increase in food prices to record high in February.\(^{17}\)

Between them, Russia and Ukraine contribute 29% of global wheat supply.\(^{18}\)

276 million\(^{19}\) more people are facing acute food insecurity in 2022 than were in 2019.

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**FAO FOOD PRICE INDEX IN NOMINAL AND REAL TERMS**


\(^{19}\)https://www.wfp.org/hunger-catastrophe
CRITICAL DECISION POINT

Government leaders now face critical decisions regarding how to prevent and prepare for this unfolding food crisis. The central issue here is the growing risk of a self-reinforcing global cascade of escalating export controls and runaway commodity prices. Food exports are only part of the challenge – fertilizer is another. Ukraine and Russia are major exporters of potash and phosphate,\(^2\) which are essential to agricultural productivity, particularly in the context of climate change and the pressure it is placing on that productivity more broadly. Natural gas is also a central factor in agriculture, and is also under extreme price pressure in the context of the conflict.

For food-importing nations, mapping the disruptions to current supply chains and diversifying the portfolio of suppliers are urgent priorities. For food exporters, decisions regarding export volumes will have profound global consequences – either fueling or defusing a dangerous global spiral of commodity price spikes. For the advanced economies and leading international institutions, supporting the most vulnerable populations must be made an immediate strategic priority if a global catastrophe is to be avoided. Finally, at this fragile moment for so many of the world’s people, halting the use of agriculture for biofuels is an urgent priority.

AN ESCALATING PRESSURE TO CHOOSE SIDES

Major interstate conflicts are more likely to erupt over the next 12–18 months than at any time since the end of the Cold War. In today’s highly interconnected global economy, any such war would present economic and geopolitical threats even for nations far removed from the actual fighting.

The risk is also great for countries with more advanced economies, given their strategic investment in a rules-based international order – the very things that are jeopardized by a major conflict. For government leaders, this demands clear thinking about how to secure their nations’ current and future prosperity when important partners are at war, and expecting help.
The risk of major interstate conflict appears to be escalating. Knowledgeable military and civilian analysts have identified plausible triggers of strife between militarily powerful countries in various parts of the world.21

Research by the Stockholm International Peace Research Institute shows that global defense spending, after declining steadily since 2009, began to rise in 2019. Recent developments indicate that this spending growth may accelerate in years to come.22
CRITICAL DECISION POINT

Government leaders now face critical decisions regarding whether or not to align with one side in a lethal and unpredictable international conflict. The central issue is selecting the criteria on which to base this decision: judgments founded on short-term expediency for immediate economic or security interests may compromise the quality of the post-conflict “peace,” while the pain caused by harder choices could exceed the resilience of even well-prepared countries, threatening stability and government survival. Failure to make an active decision, simply defaulting to either adhering to habitual international partnerships or remaining neutral, invites similar outcomes.

The natural bias when taking sides is toward traditional allies, but the reticence of the usual guarantors of international stability to engage effectively in recent conflicts raises the possibility that a risky commitment may fail, or may not be reciprocated when needed. This calls for keeping options open. The hard calculus of economic interests suggests that important trade relationships should weigh heavily if taking sides is deemed appropriate, but only if equitable trade would continue under the new rules of the post-conflict world: not all strong economies value such rules. This raises the central challenge with respect to decisions based on values rather than objective criteria: values that are not shared are a weak basis for enduring international relationships.

These dilemmas may make neutrality attractive as a hedging strategy for some countries in specific circumstances, even though it invites economic and political isolation and the long shadow of distrust with friends who read neutrality as faithlessness. For other countries, neutrality may be interpreted as a form of independence and strategic autonomy—though will only be praised by neighbors and allies if deliberate hedging requires difficult judgements as to how and how much to invest in the necessary resilience to weather isolation. Given these fraught options, it is essential that government leaders think through their decisions on how to live in a world at war, and ready themselves for the hard choices ahead.
WIDENING DIVIDES

Widening Divides are social, economic, and technological domains and perspectives likely to become increasingly polarized and polarizing.
THE VOLATILE EVOLUTION OF MONEY

The explosive rise of cryptocurrencies represents nothing less than a revolution in economic exchange, indeed a disruption of the very concept of money itself. Despite this volatility, the benefits of this new financial technology are real – from new forms of financial inclusion to streamlined cross-border transactions, crypto is a potentially powerful catalyst of growth for the global digital economy. For government leaders, however, it also creates new forms of risk that require urgent attention. Many of the hazards associated with these unregulated digital currencies are well-known: For example Bitcoin mining is known to consume as much electricity as the Netherlands.23 In addition, unregulated digital currencies are important enablers of the illicit economy24– for example, as a primary means by which cybercriminals capture ransom payments25– and for consumers and investors these novel currencies carry significant risks of fraud and privacy violation.

Although Bitcoin is now primarily only a speculative financial asset, other cryptocurrencies are increasingly delivering on the original inclusive promise of the technology, including stable coins which are backed up by stores of liquid assets linked to traditional currencies. While this integration is expanding the universe of viable use cases, the precise nature and extent of the interdependence between these new forms of digital assets and the traditional financial system is uncertain, creating significant concern among policymakers. This has caused the Financial Stability Board to warn26 that risks to global financial stability could “escalate rapidly”.

23 https://ccaf.io/cbeci/index/comparisons
25 https://www.npr.org/2021/06/10/1004874311/how-bitcoin-has-fueled-ransomware-attacks
26 https://www.ft.com/content/5be86187-1be7-4eb9-8272-116d001dec17
**KEY DATA POINTS**

87 countries, representing over 90% of global GDP, are exploring Central Bank Digital Currencies (CBDCs).²⁷

$1.5 trillion added to the overall market value of cryptocurrencies in 2021.²⁸

$180 billion: Total market capitalization of stablecoins (price-pegged cryptocurrencies), up from $38 billion a year ago.²⁹

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**CRYPTO’S TOTAL MARKET CAP HAS SOARED IN ONE YEAR**

![Market Cap Chart]

DATA FROM NOV. 30, 2020 TO NOV. 9, 2021

Fortune

²⁷ https://www.atlanticcouncil.org/cbdctracker/
Government leaders now face a critical decision regarding how to regulate cryptocurrencies and balance their role in the financial system relative to both traditional currencies and increasingly prevalent CBDCs. The central issue is managing the trade-offs between financial innovation, inclusion, and dynamism on the one hand and financial stability, fairness, and justice on the other. Ultimately, the decision requires making tradeoffs between the benefits in terms of financial innovation, inclusion, and facilitation of cross-border trade offered by cryptocurrencies and the potential risks these currencies pose to the stability of the financial system.

For most countries part of the answer is likely to involve the creation and maturation of CBDCs, which can offer some of the benefits of cryptocurrencies in the context of effective regulation and transparency. In any case, cryptocurrencies themselves require a sound regulatory approach that must include an assessment of the extent to which the nation’s payment infrastructure is in the hands of the private sector. Given the likelihood of increasing volatility in the global economic system, financial resilience requires a robust approach to payments infrastructure. In addition, the regulatory approach must manage the risks of capital flight and ensure consumer protection, including with respect to privacy. One critical step to capturing maximum benefit from a thriving private cryptocurrency ecosystem is to ensure that it remains competitive and does not become dominated by a limited number of players.
SANCTIONS LABYRINTHS: Navigating the New Complexity of International Financial Relations.

GEOECONOMIC POWER ON DISPLAY

Geoconomics – the use of economic tools to advance geopolitical objectives—is now a primary tool of state power. In the context of the Ukraine crisis, Western powers and allies around the world have imposed the most comprehensive package of financial and technological sanctions ever applied to a nuclear-armed great power. Given the fact that, at the time of this writing, no Western leader has announced conditions under which sanctions may be lifted, it is possible they will continue to be applied over time. In the deeply integrated international financial system, and in a world of integrated global value chains, the nature of sanctions is such that their reach extends far beyond the immediate, intended target in extremely complex and at times uncertain ways.

Furthermore, entities that intentionally violate sanctions often skillfully mask how they do so, exposing their business and trading partners to unseen risks. It is this labyrinth within which governments must now navigate, engaging in globalized economic activity and international relations among a web of dangerous tripwires.

30 https://www.chathamhouse.org/2016/12/geoeconomics-explained
The effects of sanctions in Russia have been almost immediate: The ruble has lost approximately 40% of its value against the dollar; the Russian Central Bank has more than doubled interest rates; and the government has issued capital controls for the first time since the 1990s.

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**KEY DATA POINTS**

**INCREASE IN SANCTIONS OVER TIME**

VOX EU Global Sanctions Database
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how they will navigate the sanctions labyrinth – including the extent to which they will engage in punitive measures by signing onto sanctions regimes enacted by others. The central issue complicating this decision is the intense bifurcation of the global order, in which the division of political and economic relations is only growing more entrenched. This is evidenced by the moves Russia has made to rid itself of the yoke of the American dollar: Since 2014, the country has developed elements of an independent financial infrastructure, and sought to reduce its use of dollars in international transactions and in foreign exchange reserves. By the end of 2020, more than 83 percent of Russian exports to China were settled in euros.34 In navigating a sanctions rivalry of this scale, nations may be forced to pick sides in a situation where, in any course taken, international relationships will be strained. Failure to make a decision with respect to international financial engagement is itself a decision, as neutrality amid rising economic contention will present risks and drawbacks of its own.

For government leaders to chart the best path forward, they must marry quantitative economic analysis with uncertainty-based futures analysis. In other words, they must seek to understand the economic ramifications of various choices of action, across a range of different scenarios. The assessment will necessarily include a scope of issues beyond the strictly economic, however, given the importance of allies and partners for other reasons – most crucially in matters relating to national defense. Given the stark divisions that have now emerged in a world that had been moving toward greater global integration for decades, the current environment represents a crucial turning point – and may demand hard choices for more governments around the world.
The global debt load is at record levels— a direct consequence of the long period of accommodative monetary policy in the aftermath of the global financial crisis, amplified by the historic monetary and fiscal response to the COVID-19 pandemic. In both the public and private sectors, the current debt boom is significantly longer than previous cycles. With the unanticipated rise in inflation prompting monetary tightening in leading economies, the debt service burden will increase.

For most countries, but especially for emerging economies whose debt is denominated in foreign currency, the increased debt-service burden will demand a fiscal adjustment, which may prove extremely challenging depending on a country’s underlying economic conditions and financial buffers. For government leaders, the need to address government and corporate debt in a tightening monetary environment demands coherent institutional, regulatory, and policy frameworks that will force strategic tradeoffs with respect to national priorities—and potentially compel painful choices with respect to which actors receive support, and which do not.
Global government debt hit a new record, at 99% of global GDP by the end of 2020.36

Corporate debt stood at 98% of global GDP at the end of 2020.37

37 https://blogs.imf.org/2022/02/23/governments-must-choose-to-support-or-restructure-heavily-indebted-firms/?utm_medium=email&utm_source=govdelivery

Reuters (https://www.reuters.com/business/global-debt-is-fast-approaching-record-300-trillion-iif-2021-09-14/)
Government leaders now face a critical decision regarding how to address the large government and corporate debt that has accumulated over the past decade, and expanded in the unprecedented context of the coronavirus pandemic. For government debt, the central issue is that the reforms required, whether in the form of fiscal retrenchment, taxation, or privatization, may slow or reverse an economic recovery that is just beginning to take shape, endangering precarious political and social stability. With respect to corporate debt, as the fiscal space for government maneuverability continues to shrink, governments will be forced to target their financial support only to those entities judged most likely to thrive. The decision of which firms to support and which to restructure or liquidate will be economically and politically fraught. Failure to address either debt bubble risks even greater instabilities in the bond and financial markets. Indeed, higher interest-rate environments are associated with greater sovereign-debt and financial crises, due precisely to such policy errors.

With respect to the public sector, government leaders will need to set transparent, calibrated criteria for managing debt levels. One fiscally inexpensive but technically demanding lever will be catalyzing GDP growth through policy reform, the precise contours of which will depend on diverse national and sectoral factors. In conjunction with moderate fiscal consolidation and privatization, reform can signal government intent and preempt signs of debt distress. For developed countries, the fiscal space is considerably larger, allowing a more gradual ramp-down in deficit spending, while additional policy tools, such as interest-rate setting, provide the foundational means to influence the operating environment. With respect to private debt, government leaders will need to fortify insolvency and restructuring regimes to ensure protection against a corporate-debt crisis. Any continued support to firms must be provided with a careful eye toward the risks of moral hazard and the emergence of “zombie” firms that survive only with state assistance. The post-COVID economic recovery that is now building momentum will remain frighteningly precarious if governments fail to deliver effective policy to manage debt risks.

[38] https://www.brookings.edu/blog/future-development/2020/02/12/developing-economies-face-a-rough-ride-as-global-interest-rates-rise/
LIBERTY VS. ORDER:
NAVIGATING THE NEW POLARIZATION

In late January, political analysts were stunned by the international news: A convoy of truckers had shut down the quiet, polite capital city of Ottawa and blocked international trade. Despite the surprise, it was merely the latest incarnation of an anti-government sentiment that has been growing around the globe for well over a decade. The rise of the Tea Party in US politics is a notable starting point, but the sentiment has exploded with anti-mask, anti-vaccine, and overall anti-government-control protests and activity in the wake of the COVID-19 crisis.

While protests are fueled in some instances by misinformation, individual liberty as a firmly held value speaks less to the current media and information environment than it does to a legacy of discourse pitting individual and civil liberty against national and collective security. For government leaders, the rising pitch and global spread of this strain of polarization requires urgent attention to address the perception that liberty and order are at odds.
The number of mass protests globally has increased by **11.5%** per year, on average, since 2009.\(^3\)

By spring **2021**, those on the ideological right were much more likely than those on the left to believe there should have been fewer coronavirus restrictions on activity, with a **45-point** difference in the US, a **21-point** difference in Australia, and a **20-point** difference in Germany.\(^4\)

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3. [https://www.economist.com/graphic-detail/2020/03/10/political-protests-have-become-more-widespread-and-more-frequent](https://www.economist.com/graphic-detail/2020/03/10/political-protests-have-become-more-widespread-and-more-frequent)

CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to respond to these growing protests in a way that honors and respects the two important and not wholly incompatible imperatives of liberty and order. The central issue is that the fundamental purpose of government is to provide order, while negative liberty41 (or the absence of obstacles, barriers, or constraints) largely views that raison d’être as undesirable at best, and illegitimate at worst. This makes any government effort to respond to liberty-centric protest fraught, however, failure to confront the potentially dangerous distortions and threats emanating from the narrative that individual liberty should take precedence over all else may lead to increasingly dangerous protests, greater disruption, and in worst-case scenarios, deadly violence.

As government leaders seek to navigate toward a balance between liberty and order, short-term measures to stem further unrest must be coupled with long-term investments to rebuild social capital and domestic cohesion. In the near-term, communication of any policies that may be perceived to impinge upon liberty must be carefully calibrated, to ensure illustration of the ways in which the given policy, through generation of public goods and shared value, contributes to individual security and freedom. At the same time, investments in social capital that reach beyond insular, like-minded communities will be a prerequisite to lasting social cohesion, easing the often-challenging business of governing.

All concerned parties know the extremes: complete order with no liberty is oppressive dictatorship; complete liberty with no order is anarchy. All can agree neither route is appealing – what government leaders must do is find the appropriate balance, and the tools to enact that balance, to preserve both liberty and order for everyone.

41 https://plato.stanford.edu/entries/liberty-positive-negative/
From the perspective of government, the COVID-19 pandemic revealed the extreme importance of trust. The performance of countries in navigating the pandemic has been empirically demonstrated\(^\text{42}\) to be more a function of trust in government and interpersonal trust, or social capital, than of other measures of government effectiveness or the extent to which the country is democratic or authoritarian in its political orientation.

In addition, trust in government has fallen globally from 65 percent in 2020 to 52 percent in 2022.\(^\text{43}\) Government now falls behind business and NGOs in terms of public trust. In this context, many governments face a crisis of legitimacy that demands innovative approaches to creating public value and rebuilding trust.

\(^{42}\) [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00172-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00172-6/fulltext)

\(^{43}\) [https://www.edelman.com/trust/2022-trust-barometer](https://www.edelman.com/trust/2022-trust-barometer)
KEY DATA POINTS

40%: The reduction of infections that would have occurred globally if all countries had interpersonal trust at the level of Denmark.44

48% of Edelman survey respondents view government as a divisive force in society.45

Trust in government declined 13 percentage points from 2020 to 2022.46

GOVERNMENT AND MEDIA SEEN AS DIVISIVE

These institutions are...

\[\text{a dividing force in society} \quad \text{a unifying force in society}\]

\[\text{Government} : -12\% \quad \text{Media} : -11\% \quad \text{Business} : +14\% \quad \text{NGOs} : +21\%\]

2022 Edelman Trust Barometer
https://www.edelman.com/trust/2022-trust-barometer
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to reimagine the role and redesign the operating model of government in a transformed future where trust is the essential fuel of public-sector effectiveness. The central issue is that the pandemic placed the institutions of government at the very center of national attention in almost every country – revealing wide gaps in performance between countries. The result was not only diminished trust in government relative to business and NGOs, but also altered expectations. In a world of accelerating digital innovation in which citizens have become accustomed to ever more tailored and sophisticated private-sector products and services, their expectations with respect to government have been raised dramatically. In parallel, the burdens on government have grown exponentially, given not just the demands of pandemic recovery, but also the growing challenges of extreme weather, geopolitical conflict, and the prospect of technology-driven labor displacement – all in the context of tremendous fiscal pressure.

Facing this perfect storm of higher expectations, new challenges, and budgetary constraints, governments must redesign the operating model in ways that allow them to generate higher degrees of public value in new ways. Governments must develop new skills of market design and activation so that they can identify public goods that well-governed markets can deliver, and then create competitive markets to do so. By harnessing market forces, government can deliver outcomes with a light footprint. Governments must also increase their use of digital technology not just to improve the efficiency of public services and remove bureaucratic burdens through ever more “invisible” government, but also to enhance transparency and therefore trustworthiness in the eyes of users. In addition, given the intensifying and intrinsically global challenges we are facing, governments of all countries must find new ways to maximize their global influence. This requires new, proactive forms of diplomacy and partnership with the private sector to build aligned coalitions with the weight to influence outcomes that will otherwise be decided only by great powers and corporate giants.
System Disruptors are wholly new patterns, domains, or classes of actors that will require government engagement.
A PRIMARY THREAT TO
DIGITAL ECONOMIC GROWTH

A new, digitally sophisticated generation of cyber-criminal networks is emerging, modeling their operations on legitimate businesses. With ringleaders located in one country, and hackers and developers in another – all supported by globally distributed operations, finance, and call-center teams – these organizations are benefitting from both the anonymity provided by the Internet and the disparity of legal frameworks and technical capabilities across nations.47

The growth of these organizations coincides with the expansion of global digital connectivity, creating an operating environment maximally advantageous for criminal innovation – one characterized by low risk and high reward. For government leaders, this threat demands urgent international cooperation; the law enforcement mechanisms of any one country apply only nationally, while these cybercrime syndicates target citizens, businesses, and governments in nations in which they have often never set foot.

WORLD GOVERNMENT SUMMIT

CRITICAL DECISION POINTS FOR GOVERNMENT LEADERS

KEY DATA POINTS

Research from Michigan State University identifying common attributes of organized cybercriminal networks found that these groups cause an estimated $445 billion to $600 billion of harm globally per year.48

Information and communications technology (ICT) is now being used to facilitate various forms of traditionally offline organized-crime activities, including the trafficking of human beings, wildlife, drugs, and firearms.49

NUMBER OF ORGANIZATIONS AFFECTED BY TARGETED RANSOMWARE ATTACKS, JAN 2020 TO SEP 2021

48 https://www.sciencedaily.com/releases/2020/01/200116123805.htm
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to balance the requirement to defend against cybercrime syndicates with their traditional conception of sovereignty as it pertains to law enforcement. The central issue is that the deep international coordination necessary to prosecute cybercrime often calls for activity that is contradictory to various legal precedents and is made challenging by the confines of national jurisdictions. In the absence of a superseding legal framework, cybercrimes are being addressed through a patchwork of reciprocal agreements, yet these require nations to relinquish some measure of their own authority. Should nations fail to take decisive action to cooperatively counter cybercrime, they will leave their citizens vulnerable to ever-more-sophisticated theft, extortion, and coercion. Should they choose not to engage in multilateral discussions toward global solutions, their countries may ultimately face pressure to adopt international legislation they had no hand in shaping.

As countries navigate this decision, allies will be the natural starting place for cooperation in sharing data, confiscating ill-gotten gains, or allowing prosecution across borders. However, the more advantageous candidates for cooperative agreements will be countries from which threats most commonly emanate, where negotiating agreements may prove challenging given their limited legal and cyber capacities – the very traits criminals find attractive. In parallel, governments must decide the extent to which a broader multilateral legal framework will serve them, including assessment of the level of international harmonization that will be palatable to domestic constituencies concerned with national and data sovereignty, particularly in the context of the COVID-19-driven explosion of digital personal data. Given the intensity of the threat from cybercrime syndicates and the rising cost of defending against them, bilateral and multilateral agreements of this sort represent a compelling path forward.

A GROWING WHOLE-OF-SOCIETY THREAT

In response to the extreme advantage of the preeminent military powers in traditional warfare, new forms of conflict have emerged in the “gray zone” between military and non-military action. Gray-zone warfare involves the targeting of all segments of society—notably including the perceptions of citizens and global audiences. These tactics most often avoid direct engagement with the military—particularly in cases where traditional units hold a clear advantage.

The hybrid tools of gray-zone warfare include disinformation operations; political and economic coercion; cyber and space operations; and the use of proxy forces to mask state action. Gray-zone activity continues to grow in volume and sophistication as competitive innovation results in continuously evolving approaches.

This accelerating transformation of conflict is of profound strategic importance for all government leaders because gray-zone warfare represents much more than a military threat limited to the context of actual war. Instead, this ever-more-prevalent form of disruptive conflict is continuous, hidden, and directed precisely at the most vulnerable, least defended national domains. Therefore, building readiness for gray-zone warfare requires approaches that are both innovative and integrated at the whole-of-nation level.

51 https://www.csis.org/programs/gray-zone-project
Over **1000** Private Military Security Companies (PMSCs) currently operate worldwide,\(^53\) with some employing as many as **500,000** people.\(^54\)

More than **200** Chinese fishing vessels ventured inside the limits of the Philippines’ exclusive economic zone and very close to Vietnam-occupied territory in the Whitsun Reef incident – an example of hybrid maritime warfare of unprecedented scale and scope.\(^55\)

**CHINESE GOVERNMENT VESSELS NEAR THE SENKAKU ISLANDS**

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\(^{55}\) https://www.iiss.org/blogs/analysis/2021/04/whitsun-reef-incident-china
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to defend their nations against increasingly sophisticated forms of gray-zone warfare in ways that undermine its primary mechanisms of action, namely strategic surprise and disinformation. Preemptive disclosure of the intended gray-zone actions of adversaries represents a potent means of doing just that. This type of “transparency warfare” involves publicly disclosing the intended actions of an adversary before they take place. If well-timed and based on accurate intelligence, doing so has several strategic and tactical benefits – as demonstrated in American releases of selected intel to allies and the media in advance of the Russia-Ukraine conflict of Ukraine. First, it eliminates or reduces the disorienting cognitive impact of the intended strategic surprise associated with a given action. Second, by alerting the full set of stakeholders targeted in the action, this approach allows them to prepare for it – strengthening resilience. Finally, particularly in cases such as false-flag actions where an adversary intends to blame or manufacture an opponent, a transparency operation can disrupt the intended narrative before it takes root.56

The central issue is that preemptive transparency operations of this kind require not just anticipating gray-zone actions through highly effective intelligence, but also being willing to disclose that intelligence – potentially placing its sources at risk. For government, this creates two clear imperatives. First, it increases the value of establishing pre-staged intelligence-sharing partnerships with key allies as a means of both increasing anticipatory awareness and diversifying potential sources of information to prevent adversaries from correctly surmising the source. Second, it requires building the capacity to formulate and disseminate messages across society in ways that are unassailably credible. This approach requires an absolute commitment to the truth in what is disclosed, as anything less will eliminate the value of such disclosure in the future.

METAV baese GOVERNANCE: PROTECTING CITIZENS AND SOVEREIGNTY IN A NEW WORLD

A GOVERNANCE VACUUM IN AN EVER-MORE VITAL POLITICAL AND ECONOMIC DOMAIN

It will become increasingly clear over the next several years and beyond that the Metaverse, regardless of one’s views of its appeal, will become much more than hype. Over time, this new domain will increasingly be inhabited by very real people engaging in social interaction and economic activity on a vast and complex scale. The decisive entry of Meta (formerly Facebook), Microsoft, and Google into the Metaverse market as well as the financial performance of other major players such as Nvidia and Roblox is a clear indication of its economic viability.

Just as the Internet has transformed not only our social lives, but also our cultures and politics, the Metaverse is likely to do the same, except even more pervasively since it can potentially include virtual versions of all aspects of our lives. Because it will be inhabited by the citizens of many countries, including people of all ages and ethical orientations, it will both be a domain of great opportunity, but also grave risks. For government leaders, the Metaverse therefore urgently demands entirely new and proactive approaches to policy and regulation at the national and multilateral levels, as well as new forms of public-private collaboration. Anything less is likely to result in missing new opportunities for innovation and growth on the one hand, and leaving citizens and the national interest vulnerable to new challenges and threats on the other.
$800 billion: Estimated size of the Metaverse market in 2024.\(^57\)

17 companies were included in China’s newly formed Metaverse Industry Committee to “promote the healthy, orderly and sustainable development of the Metaverse.”\(^58\)

25% of people will spend at least one hour per day in the Metaverse by 2026 according to Gartner.\(^59\)

**METAVERSE MARKET GROWTH OUTLOOK**

- Social Media Ads
- Gaming, Ar & VR Hardware
- Total YoY Growth (RHS)

Live Entertainment
Gaming Software, Services & Ads

Bloomberg
https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/

\(^{57}\) https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/

\(^{58}\) https://www.ft.com/content/bf907e38-ff1f-41c7-b062-529ef238aec4

CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to ensure that national interests and citizen rights are protected in the Metaverse. The central issue is the power relationship between the private-sector platforms building the operating systems of the Metaverse and the individuals actually inhabiting it. Absent effective governance, the rules of the Metaverse will be set in ways that optimize earnings, potentially in ways detrimental to the well-being of individual users.60

As a result, a core priority for governments will be negotiating with technology companies to ensure that users are given preeminent power within the platform to determine the boundaries of their own experience within it, consistent with the preferences and rights of others. In other words, our political systems and governance institutions must be updated to address the emerging challenges of the Metaverse. Governments must decide how assertively to negotiate to establish transparency protocols to ensure the safety of citizens in the Metaverse against all forms of crime, manipulation, and abuse. In addition, they must establish rules for privacy, data portability, and content moderation that are aligned with their existing national policies. Given the diversity of countries that will inhabit the Metaverse, achieving this alignment between national policies in the physical world and the Metaverse will require sophisticated and reliable forms of digital-identity management.

60https://www.wsj.com/articles/the-metaverses-effects-on-mental-health-trivial-or-troubling-21641740414
As technology companies have grown into sector-spanning digital ecosystems, their reach and power has eclipsed competitors and outgrown regulators. Now, a “techlash” has citizens lobbying for greater control of their data; small businesses crying foul at monopolistic behavior; and governments seeking to regain authority. In a form of global synchronicity rarely observed, governments around the world are moving swiftly\textsuperscript{61} to curb the power of global tech giants, including through the creation of highly empowered technology-policy and regulatory institutions with the mandate to rein in these players.

The leaders of these new bodies will have tremendous and rapidly growing influence over the next 12–18 months and beyond. For government leaders, such a regulatory shift calls for a clear view of national priorities at the intersection of technology, economy, and society and for active representation of those national interests internationally.

\textsuperscript{61} https://www.nytimes.com/2021/04/20/technology/global-tipping-point-tech.html
80% of surveyed Americans believe the federal government “needs to do everything it can to curb the influence of big tech companies that have grown too powerful and now use our data to reach too far into our lives.”

Governments in at least 48 countries pursued new rules for tech companies on content, data, and competition over the last year.
Government leaders now face a critical decision regarding how to navigate engagement both with newly empowered regulators and the powerful lobbying arms of major tech players. The central issue is that a small number of actors hold the vast majority of regulatory power in a domain that is global to an extent no single policy domain has ever been before. In short, the decisions of a few powerful actors have ramifications for nearly every individual on the planet in both universal and uniquely personal ways. Failure to engage in this global conversation will leave nations, particularly those with smaller tech-sector footprints, at the whims of the regulatory approaches of countries and companies with priorities that may not align with their own.

For any nation seeking to effectively navigate and maximize its influence in this tech policy landscape, the emerging model of an empowered regulatory interlocutor offers a blueprint to follow. The ability to leverage whole-of-government knowledge and resources across technology, policy, and international relations will be crucial to their success. At the same time, conduits that ensure whole-of-society representation will support regulation that is one step ahead of the curve, shaping innovation and guiding markets toward public value, rather than merely reacting to the latest technology launch. For the vast majority of nations that do not host trillion-dollar tech giants, identifying shared interests and forming coalitions will be vital to multiplying influence. As the world enters a seismic shift in technology-policy power, the implications of coming decisions can be expected to reach far beyond any conception of a bounded tech sector, with impacts for generations to come.
THREAT DEMOCRATIZATION: PREEMPTING THE NEXT LOW-COST INNOVATION IN WARFARE

In the 21st century, advanced military forces have frequently been surprised by novel uses of inexpensive technology that threaten strategic success. One such surprise emerged in Iraq and Afghanistan in 2003, in the form of improvised explosive devices (IEDs), a weapon given new ubiquity and lethality by cheap electronics found in car alarms and mobile telephones.

Sophisticated state militaries struggled for years and spent hundreds of millions responding to IEDs, which killed thousands of their soldiers. Another dangerous surprise is still unfolding, in the form of flying weapons based on common, even toylike unmanned aerial vehicles (UAVs) – “drones” – that have been weaponized with explosive or other military payloads.

The Fourth Industrial Revolution and the ensuing proliferation of technologies only contribute to the sophistication and speed with which new, affordable threats can be developed. For government leaders, these nascent – and still unborn – threats demand urgent action to build agile capabilities to detect and respond cost-effectively to lethal surprises that will emerge with increasing frequency.
These weapons give attackers an incredible cost advantage: In 2017, a US ally used a Patriot missile (usually priced at about $3 million) to shoot down a small quadcopter drone that cost less than $1,000.64

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**IMPROVISED EXPLOSIVE DEVICES (IEDS)**

ReliefWeb, Global Explosive Casualties 2020

CRITICAL DECISION POINT

Government leaders now face a critical decision regarding military responses to emerging tactical threats based on common, inexpensive technologies. Drones are the newly proximate danger, but others will emerge as resource-poor, non-state adversaries seek military advantage by exploiting ubiquitous digital technologies, the information universe, digital environment and other features of contemporary economies. The central issue is the need to recognize and respond quickly and comprehensively to new threats, regaining the initiative without conceding an ultimately unaffordable cost advantage to the enemy. The innate conservatism of state militaries impedes this: Responses that compete for resources with cherished conventional capabilities can be resisted and delayed, prolonging the damage of surprise.

Paradoxically, conservative militaries can have short memories that obstruct recognition of an old tactic presented in a new way: defeated in one war, military methods simply await opportunities to surprise the unwary. Conversely, attempts to smother new threats by reflexively flooding the problem space with candidate technical solutions can lead to waste in the form of expensive orphan capabilities that must be managed and ultimately disposed of.

The tools needed to recognize and respond to these surprises span all the elements of a national defense enterprise: intelligence, doctrine, training, research and development, acquisition, finance, and logistics must all be orchestrated to achieve robust solutions. Given the risks posed by these low-cost, high-impact methods of warfare, there is an urgent need to invest in the capacity to recognize and respond comprehensively and efficiently to their proliferation.
The global promise of the space domain has never been greater or more important – and, as 2022 unfolds, never more imperiled. The economic potential of space continues to surge, with the sector forecast to reach $1 trillion by 2040. In addition, the unique value of space-based science and technology to enable transformative solutions to many of our most urgent global challenges has never been clearer or more compelling. A new generation of satellite technology is enabling unprecedented precision in measuring and modeling ice sheets to forecast sea-level rise.

The same technology is enabling precise monitoring of CO2 emissions and natural-gas leaks to support follow-through on climate commitments. Space also is transforming food and water security through empirically based prediction of shortfalls, enabling early policy interventions. Space, our shared global inheritance, is both a vast economic opportunity and an indispensable source of transformative solutions. In the current environment, however, the global value of this domain for all countries is being threatened by an explosive acceleration of ungoverned economic and geostrategic competition.

65 Harvard Business School, “[a] tragedy of the commons refers to a situation in which individuals with access to a shared resource [also called a common] act in their own interest and, in doing so, ultimately deplete the resource.”
66 https://online.hbs.edu/blog/post/tragedy-of-the-commons-impact-on-sustainability-issues
67 https://www.morganstanley.com/themisglobal-space-economy
Key Data Points

Over 29,000 satellites and pieces of space debris are large enough to track from Earth.\(^6^8\)

Private investment in space-infrastructure companies in 2021 reached $14.5 billion (an increase of more than 50% over 2020).\(^6^9\)

Increase in Operating Satellites

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\(^{68}\) https://www.nature.com/articles/d41586-021-02167-5

\(^{69}\) https://www.ft.com/content/8ca9412f-9284-446d-81da-d2be4121020f?shareType=nongift
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to ensure their countries’ long-term ability to realize the transformative opportunities of space. The central issue is twofold. First, the sudden increase in the affordability of access to space, the democratization of launch technology, and a regulatory race to the bottom to attract investment has resulted in an explosion of private-sector entrants into the space domain, with strong incentives to seize first-mover advantage at the expense of stable growth. Nowhere is this more visible than in the growing levels of satellite congestion and the intensifying legal battles between leading space corporations and national space agencies.70

Second, and more importantly, intensifying geostrategic competition and conflict on Earth is fueling an unstable militarization of space, undermining progress on the global governance agreements that are in the interest of all countries. Despite the apparent vastness of space, the thermosphere and exosphere where satellites and spacecraft operate is at risk of becoming crowded, contested, and conflictual – populated by a growing diversity of public and private actors and systems operating without shared rules. Not only is this increasing the risk of costly, dangerous accidents, but it is also diminishing the value of the space commons for some of its most transformative potential applications.

Small and medium-sized countries, as well as leading private-sector space companies, have a shared strategic interest in the emergence of a well-governed space domain – one in which the risk of destabilizing conflict may be successfully managed. By joining together for maximum leverage, aligned countries can accelerate progress on existing efforts – particularly the 21 guidelines71 of the UN Committee on the Peaceful Uses of Outer Space. Moving these principles from voluntary guidelines to enforced requirements would be a powerful step toward advancing the interests of all.

70 https://www.ft.com/content/deaebceb-97ed-4022-84ad-e7057240afbf
POLICY ACCELERATORS

Policy Accelerators are emerging tools and instruments by which government leaders can drive more rapid progress in a range of policy domains.
EDGE GOVERNANCE:
LEVERAGING TECHNOLOGY FOR LOCALIZED GOVERNANCE AND PERSONALIZED SERVICES

17 AN EXPLOSION OF DATA AMIDST A CHANGING RELATIONSHIP WITH THE STATE

The COVID-19 pandemic highlighted the challenge for government of delivering localized responses while also providing coordinated, whole-of-nation orchestration. The necessity of person-by-person tracking and additional protection measures for individuals at heightened risk required decision-making and provision of services at the granular level, while addressing resource shortages and overburdened healthcare facilities demanded centralized information and authority to marshal resources at scale.

In the midst of the crisis, governments and individuals granted emergency access to data and resources that local authorities otherwise would not have had access to, while creating new channels for flows of information and services between citizen and government. This marked both a decentralization of decision-making authority and a shift in the relationship between citizens and the state. For government leaders, this signals an opportunity to remove some of the distance between government and citizen, bringing policymaking to the edge—closer to the people than ever before, without losing the benefits of centralized policymaking.
In the UK, targeted support to individuals at elevated risk of contracting COVID-19 – including food distribution and pharmacy deliveries – was made possible by the central government’s decision to provide local authorities with access to National Health Service databases.72

Jakarta Smart City (JSC) improved responsiveness of public services with big-data analytics of citizens’ feedback, analyzing an average of 40,000 items of feedback per month from mobile and social-media channels, and identifying problem areas to be addressed more rapidly.73

COUNTRIES PROVIDING ONLINE SERVICES FOR VULNERABLE GROUPS, 2016, 2018 AND 2020


UN E-Government Survey (pg. 79)


https://www.ibm.com/case-studies/jakartasmartcity
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding the extent to which governing authority should be decentralized to citizens. Localized decision-making can provide the greatest return to citizens tailored to their actual needs, closest to reality on the ground. However, too much decentralization can leave central governments dealing with inequality and patchwork approaches to shared challenges that can be addressed more efficiently through centralized resource allocation. It may also leave them with limited information in times of crisis. Nations that fail to strike the right balance may find themselves insufficiently adaptable in the next global disruption, unable to effectively serve citizens.

As central governments seek to empower decision-making at the local level, it will be of central importance for all to recognize there is no static equilibrium. Rather, the balance-of-power distribution will remain perpetually in flux, as external events constantly alter the metrics for effective government. The single most important resource for decision-makers at all levels of government will be information – a high-resolution understanding of what citizens need, in real time. Technology is enabling this through the ever-greater prevalence of the Internet of Things and other applications of big-data analytics. Furthermore, the pandemic ushered in a new relationship with data; if governments can carefully nurture this relationship, transparently and responsibly managing the information to which they have gained access – with due deference to the legitimate privacy interests of users – the opportunity to deliver added value at the level of individuals is nearly limitless.
In last several months, there has been a major shift in employment driven by the economic turmoil of the pandemic. Even longer-lasting than the labor market reshuffling will be the results of a nearly universal reassessment of what it is individuals seek from employment. While compensation will always be an important driver, the priorities for many employees have been radically altered by an emergent global reckoning with burnout—the unmanaged stress at work that has now been recognized as the cause of over 2.8 million deaths annually.\(^74\)

Amid widespread employee apathy and disengagement, governments are reimagining not just economic and social policy (such as a four-day work week), but also new community designs to create conditions maximally suited to the preferences of the next generation of workers, makers, and innovators. For government leaders, the Great Resignation,\(^75\) the Lying Flat movement,\(^76\) and other similar phenomena represent a fraught economic moment. However, they also offer an opportunity to bring about structural transformation in the very nature of work – centering on individual well-being and purpose, and unleashing the vast potential of an increasingly diverse workforce.

\(^75\) [https://www.npr.org/2021/06/24/1007914405/as-the-pandemic-recedes-millions-of-workers-are-saying-i-quit](https://www.npr.org/2021/06/24/1007914405/as-the-pandemic-recedes-millions-of-workers-are-saying-i-quit)
Two-thirds of people who left their jobs in 2021 did so due to issues related to engagement and wellbeing: 42% quit for reasons tied to their bosses and organizational cultures; 21% left for reasons related to poor well-being and work-life balance, and a desire for greater flexibility – including the ability to work remotely.\(^77\)

At least six nations have implemented 4-day workweek pilot programs or nationwide policies, and major multinational corporations from the UK’s Unilever to Japan’s Panasonic have implemented their own four-day policies.\(^78\)

**HYBRID WORK IS INEVITABLE**

Business leaders are on the brink of major changes to accommodate what employees want: the best of both worlds.

- 66% of leaders say their company is considering redesigning office space for hybrid work.
- 73% of employees want flexible remote work options to stay.
- 67% of employees want more in-person work or collaboration post-pandemic.

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78 [https://www.forbes.com/sites/jackkelly/2022/02/03/the-four-day-workweek-is-gaining-big-momentum-signing-up-50-organizations/?sh=25336bc267b6](https://www.forbes.com/sites/jackkelly/2022/02/03/the-four-day-workweek-is-gaining-big-momentum-signing-up-50-organizations/?sh=25336bc267b6)
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to reorient economic and labor policy to accommodate the altered priorities of a newly empowered worker – breaking through what’s been referred to as “anti-ambition”\(^7\) to reignite passion, ingenuity, and productivity, thereby driving economic growth. The central issue complicating this decision is that the challenge spans structural economic, sociopolitical, and psychological dimensions, requiring a complex, multidisciplinary approach to designing corrective measures. Failure to properly address any one of these dimensions may lead toward even greater dissatisfaction in the workforce; lack of economic productivity; and socio-political tensions.

A mandatory initial step as governments seek to design deep structural change is to convene a national dialogue, learning not only from the workforce itself, but also from experts in human motivation, psychology, neuroscience, and behavioral science. A more nuanced understanding of the root causes of the current malaise will provide policymakers the ability to develop a proper solution. One potentially productive pathway of sparking passion and energy in the economic sphere is by creating semi-protected space for entrepreneurship and innovation. Some of the most successful countries in this regard credit a strong social safety net. However, for each country and culture a social safety net will be meaningfully unique, targeting fallback support in those areas otherwise least accessible, and must be implemented alongside an investment in developing or strengthening cultural attitudes tolerant of risk – a fundamental prerequisite of innovation ecosystems.

\(^7\)[https://www.nytimes.com/2022/02/15/magazine/anti-ambition-age.html]
DIGITAL TAXATION POSITIONING: SECURING THE FAIR SHARE OF THE NATION’S DIGITALLY CREATED VALUE

The explosive growth of the cross-border digital economy has created tremendous value for the full range of private-sector enterprises. The gains of multinational enterprises have been particularly striking. At the same time, these highly profitable cross-border digital activities have raised new questions of how those gains can and should be taxed in the countries where the value was created.

Government leaders are increasingly recognizing that adjustments to national tax policy is necessary, but insufficient. There is clear need for multilateral approaches to addressing this fundamentally cross-border challenge. Significant progress was made in 2021 when the members of OECD/G20 Inclusive Framework agreed to a Two-Pillar Solution and Detailed Implementation Plan to address the challenges of digital taxation, including a set of milestones for bringing some of the proposed measures into effect by 2023.80

This multilateral work over the coming year represents an opportunity for government leaders to co-create policy instruments that will allow them to ensure that they capture their countries’ fair share of the value created within their economies.

The digital economy was estimated to be worth 15.5% of global GDP, and has grown 2.5 times faster than global GDP over the past 15 years.81

In November 2021, 137 countries agreed to the Statement on a Two-Pillar Solution, establishing a new framework for international taxation.82

S&P 500 INFORMATION TECHNOLOGY EFFECTIVE TAX RATE (%)
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to balance their national digital-taxation policies with the efforts currently underway to harmonize international approaches. This year represents a critical window of opportunity to shape the final form of these agreements. The central issue is that the multilateral harmonization process for addressing cross-border issues will require negotiated compromises. The strategic interests of individual nations will not be reconciled without some effort. Differences in terms of level of economic development, presence of global–technology players, and perspectives on the equitable digital taxation of multinational enterprises will be resolved through technically complex negotiation. Nations that do not participate actively in this multilateral process will be at a clear disadvantage in effectively addressing their digital-tax challenges.

Clearly defining – and then skillfully advocating for – national interests in these multilateral discussions will be critical to ensuring that resulting agreement is compatible with national priorities. This must include close collaboration with key digital stakeholders in the national economy to understand challenges, requirements, and aspirations. For smaller countries, a vital means of creating negotiating leverage, given the scale and economic power of the actors involved, will be to form coalitions with others sharing core strategic interests. In parallel, government leaders can complement any agreed multilateral instruments with additional national legislation, as well as with more focused bilateral and multilateral agreements to address specific circumstances and opportunities not within the scope of any global agreement.
ANTI-CORRUPTION TECHNOLOGY: LEVERAGING AI TO DETECT ILLEGITIMATE TRANSACTIONS

Despite decades of anti-corruption efforts, corruption and various forms of fraud remain a scourge on public institutions the world over. Transparency International’s 2021 Corruption Perceptions Index shows a complete lack of movement with respect to global corruption, and significant backsliding among some of the top-scoring countries with the largest economies.83

However, as governments continue to grow increasingly digital, technologies including artificial intelligence (AI) and machine learning (ML) are finding a wide variety of applications in government – and making it more possible to detect corruption than ever before.84

By applying AI in activities such as budget audits, procurement processes, and performance evaluations, governments can identify anomalies that warrant further investigation. For government leaders, the possibilities for AI to make government more honest, transparent, and efficient are potentially transformative – but they come with the inherent risks and challenges of AI, such as trustworthiness, explainability, and loss of human control, in addition to the difficult considerations required to ensure effective execution.

84 https://ecpr.eu/Events/Event/PaperDetails/20827
Corruption reduces the EU GDP by between €120 and €990 billion every year.  

By 2020, nearly half (45%) of US government entities had experimented with AI and ML tools.

**COMPARISON BETWEEN NUMBER OF DATA BREACHES AND PERSONAL RECORDS EXPOSED, 2010–2019**

[Graph showing the number of data breaches and records exposed (in millions) from 2010 to 2019.]

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CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how assertively to tackle corruption, utilizing the powerful tools of AI and ML, recognizing that it can be a challenging undertaking with risks to domestic stability. The central issue is that aggressive anti-corruption campaigns can swiftly undermine a precarious balance within a politically shaky nation. Even within relatively stable nations, such measures may be portrayed as partisan targeting and used to sow division within the populace. Failure to address corruption, however, will contribute to erosion of trust in public institutions; corruption has been shown to have a direct negative impact on economic growth, and there is a strong correlation between corruption and political instability.  

Failure to capitalize upon the possibilities offered by AI with respect to countering corruption will leave governments with antiquated methods that are often labor-intensive, inefficient, and prone to manipulation.

As governments seek to incorporate AI into anti-corruption efforts, they will be best served by moving slowly. To stave off any instability that may be generated by swift action, governments can endeavor to design a tech-enabled, non-arbitrary process for countering corruption with transparent governance, and announce how that program will unfold over time. This creates strong incentives for those engaging in activity at the periphery of corruption to exit before punitive measures hit. Alongside this process, several countries have found that a free press, open data, and regular public releases of audit results – not merely published but widely disseminated and explained – contribute considerably toward enhancing accountability.

A final approach to countering corruption with technology is to target the governmental systems that are most ripe for exploitation: Kenya’s Industrialization Ministry partnered with IBM to study processes that inhibited the nation’s ease of doing businesses. In the same vein, AI can be leveraged to identify pain points and eradicate incentives for engaging in corrupt activities, rather than enacting disciplinary measures after abuses have already occurred. Ultimately, regardless of the specific approach, success in countering corruption requires patience and political will over many years.

87 https://www.imd.org/research-knowledge/articles/com-february-2019/
AI BOUNDARIES: DEFINING THE AUTHORITY CEDED TO AUTONOMOUS AND ARTIFICIAL INTELLIGENCE

THE NECESSITY OF RESPONSIBLE HUMAN STEWARDSHIP OF AI

Artificial intelligence (AI) has rapidly become more sophisticated and pervasive as it has been integrated into nearly all aspects of modern life. In the transition from data-driven to AI-driven workflows, AI has rapidly found its way into the narrowing and automation of choices both frivolous and strategic – with applications from consumer retail to the criminal-justice system to military conflict. This marks a fundamental shift in strategic decision-making, as humans seek faster, more reliable, and bias-free approaches to choice.90

Major risks remain: AI has shown deep vulnerability to inadvertently biased and intentionally manipulated data; is extremely vulnerable to cyber-attacks; and presents a deeply unsettling but difficult-to-quantify risk of slipping human controls altogether. For government leaders, the myriad applications of AI represent both an incredible opportunity for faster, more efficient decision-making – particularly on issues of strategic importance under time pressure – and a potentially lethal threat with life-altering consequences.

In 2021, the US Department of Justice discovered bias in an algorithm designed to help prisoners win early release by predicting their return to crime: In its sample, only 7% of African-Americans were classified as minimum risk compared to 21% of whites.91

In 2019, Tencent Keen Security Lab conducted experimental research on the autopilot systems of a car manufacturer, and managed to remotely hack the steering system.92

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AI USE CASES BY GOVERNANCE TASK

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CRITICAL DECISION POINT

Government leaders now face a critical decision with respect to the optimal application of AI in decision-making. The central issue is that while AI offers much-needed shortening of decision cycles in a world in which decision timelines have become ever more constrained, the possibility for biased or manipulated outcomes remains high – leaving a tradeoff between speed and reliable accuracy. Failure to critically assess and balance these tradeoffs will leave nations with AI applied sub-optimally, perhaps falling behind competitors who have more effectively leveraged the great power of AI to advance strategic decision-making and productivity, or alternatively ceding too much authority to vulnerable technology and putting key strategic outcomes at risk.

As government leaders determine the optimal application of AI within their countries and contexts, the first step is to evaluate the domains where AI driven decision-making can generate true strategic advantage. Prioritizing and encouraging AI adoption in select domains can ensure that the technology is maximally leveraged where useful in accelerating timelines, while people remain “in the loop” in key processes that require a human fail-safe. Central to the effective application of AI will be its transparency, allowing checks of not only the algorithms and processes themselves, but also data sets from which they identify patterns, draw conclusions, and learn. Ceding authority to AI can be an incredible tool to make governments more efficient, effective, and responsive to their constituencies in cases where prolonged deliberation is unnecessary or impractical. However, the technology demands close observation – and even more than that, careful consideration of where not to apply it.
CLIMATE INTEGRITY: TRANSLATING CLIMATE COMMITMENTS INTO REALITY

A NARROWING WINDOW FOR CHANGE

At this point, the implications of “1.5°C” as it pertains to climate change are well-known: if the threshold of one-and-a-half degrees Celsius above pre-industrial levels is surpassed by 2100, mankind will have caused severe, potentially irreversible, risks to life on Earth. The latest Intergovernmental Panel on Climate Change (IPCC) report shows we are on track to catastrophically miss that mark.93

Despite shared knowledge that the 1.5°C limit will require the world to cut emissions by 45 percent by 2030 and achieve net-zero emissions by 2050, global emissions are set to increase by 14 percent over the current decade.94 At the UN Climate Change Conference in 2021 (COP26), countries and major corporations showed solidarity in pledging to reduce their carbon emissions to zero. However, studies show that neither countries nor corporations are making the strides necessary to achieve their agreed climate goals within the necessary timeframe. For everyone on Earth, meeting these goals is an urgent imperative. For government leaders, how to do so presents a whole-of-society challenge of an enormous scale.

A study of 25 major corporations (together responsible for about 5% of global emissions) that pledged in 2021 to reduce their carbon emissions to zero in the coming decades showed that only three have taken the necessary actions to match their commitments.95

The top 20 companies have contributed to 35% of all carbon dioxide and methane since 1965.

https://www.nature.com/articles/d41586-022-00366-2
CRITICAL DECISION POINT

Government leaders now face a critical decision regarding how to meet their COP26 commitments, including how to work with the major corporations responsible for significant percentages of national emissions. The central issue is that for businesses, reducing emissions is perceived as reducing competitiveness – especially when competitors also aren’t living up to their promises. In the absence of clear monitoring metrics and methods of accountability, the incentive to follow through remains limited in the near term. Yet it is clear to all that failure to meet these commitments will result in more widespread and more severe human suffering and biodiversity loss.

Government leaders have a range of means by which they can influence the emissions of domestic corporations. While a top-down, regulatory approach may seem prudent with respect to speed and efficiency, it is likely to have negative ramifications. Firms will be resistant to top-down policies; domestic constituencies beyond the C-suite may question a heavy-handed government role; and the domestic economy is likely to suffer as firms struggle to meet new requirements.

The alternative is to work collaboratively: Government leaders must seek to create a dialogue-based, learning-oriented environment, in which policymakers engage closely with corporations to understand their needs and the ways in which various policies can ease and even accelerate the transition to net zero. Only then can various policy levers – including subsidies, tax incentives, resource pooling, and more – be appropriately calibrated to ensure minimal unproductive friction between firms and policy. To keep us from 1.5°C, what must follow is coordinated, complementary, urgent public-private action.
CONCLUSION

Government is our collective enterprise. It is the set of institutions we have created to generate shared public value on behalf of citizens and the nation as a whole.

One of its most fundamental roles is to understand, manage, and navigate strategic uncertainty. As of this writing, we have entered a period in history when that vital role is arguably more important and more challenging than it has ever been. The sheer pace and convergence of geopolitical, technological, economic, social and environmental change have reached a boiling point.

In this study, we have sought to help governments and government leaders navigate this chaotic juncture in history by anticipating a set of critical decision points so that they can take early action on them when leverage is greatest. By preparing for highest priority strategic shocks and emerging system disruptors, proactively bridging unstable divides, and harnessing emerging policy accelerators, government leaders can do more than navigate the current period effectively. They can build the foundations for the future that we want once we emerge from this current volatile chapter – a future commensurate with our vast potential and worthy of the generations to come.
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The World Government Summit Organization is a global, neutral, non-profit organization dedicated to shaping the future of governments. The Summit, in its various activities, explores the agenda of the next generation of governments, focusing on harnessing innovation and technology to solve universal challenges facing humanity. The World Government Summit Organization operates at the intersection of government and innovation. It functions as a knowledge exchange platform that convenes leaders in the public and private sectors to collaborate with world-renowned experts in creating positive impact for citizens around the world.

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