

# Deliverable 9.1

## Preliminary Report on

## Future Global

## Governance Scenarios

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## **DISCLAIMER**

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## TABLE OF CONTENTS

<b>1 Foreword</b>	<b>7</b>
<b>2 The use of scenarios</b>	<b>11</b>
2.1 Identifying premises and uncertainties	11
2.2 From premises and uncertainties to World Scenarios 2030	14
<b>3 Brief descriptions of four World Scenarios</b>	<b>16</b>
3.1 Uncertainty dashboards as scenario skeletons	17
3.2 Illustrative comparison of economic implications	18
<b>4 From World Scenarios to Global Governance scenarios</b>	<b>22</b>
4.1 A Brief Description the Global Governance Scenarios	24
Scenario 1: Regressive Global Governance in a Drifting World	24
Scenario 2: Disjointed Global Governance in a Shifting World	25
Scenario 3: Incremental Global Governance in a Rising World	25
Scenario 4: Transformational Global Governance in a Flowing World	26
<b>5 Scenario narratives</b>	<b>27</b>
5.1 Drifting	27
5.1.1 Regressive Global Governance	31
5.2 Shifting	36
5.2.1 Disjointed Global Governance	41
5.3 Rising	45
5.3.1 Incremental Global Governance	49
5.4 Flowing	54
5.4.1 Transformational Global Governance	59
<b>6 Concluding remarks</b>	<b>66</b>
<b>7 Bibliography</b>	<b>67</b>
<b>Annex 1 A dozen essential uncertainties as scenario building blocks</b>	<b>69</b>
<b>Annex 2 Issue area-specific matrices for consultations</b>	<b>101</b>
<b>Annex 3 Notes from consultations with IAB members</b>	<b>105</b>
<b>Annex 4 Notes from consultations with GLOBE partners</b>	<b>106</b>
<b>Annex 5 Global governance matrices per issue area</b>	<b>107</b>



## LIST OF ACRONYMS

AfCFTA	African Continental Free Trade Area
AI	Artificial intelligence
AU	African Union
AIIB	Asian Infrastructure Investment Bank
AMF	Asian Monetary Fund
AMRO	ASEAN+3 Macroeconomic Research Office
AR	Assessment report
AR/VR	Augmented reality/visual Reality
ASEAN	Association of Southeast Asian Nations
B2B	Business to Business
B2C	Business to Customer
BATX	Baidu, Alibaba, Tencent, Xiaomi
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BRI	Belt and Road Initiative
C2C	Customer 2 Customer
CBDR	Common But Differentiated Responsibilities
CEO	Chief Executive Officer
CMIM	Chiang Mai Initiative Multilateralization
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CRA	Contingent Reserve Arrangement
CSDP	Common Security and Defence Policy
CSO	Civil society organization
DARPA	Defense Advanced Research Projects Agency
DG	Directorate general
DMA	Digital Markets Act
DSA	Digital Services Act
EASO	European Asylum Support Office
EATP	Euro-African Trade Partnership
ECOWAS	Economic Community of West African States
EU	European Union
FDI	Foreign direct investment
FF	Fossil fuels
FIGO	Formal intergovernmental organization
FLAR	Latin American Reserve Fund
FSB	Financial Stability Board
G20	Group of Twenty
G2G	Government to Government
G2Z	Government to Citizens
GA	General Assembly
GAFA	Google, Apple, Facebook, Amazon
GAL	Green, alternative, libertarian
GDP	Gross domestic product
GDPR	General Data Protection Regulation
GFG	Global financial governance
GG	Global governance
GLG	Global Leadership Group



IAB	International Advisory Board
IAEA	International Atomic Energy Agency
ICC	International Criminal Court
IEA	International Energy Agency
IIGO	Informal intergovernmental organization
IMF	International Monetary Fund
IO	International organization
IOT	Internet of Things
IRENA	International Renewable Energy Agency
IPCC	International Panel on Climate Change
KSA	Kingdom of Saudi Arabia
L&D	Loss and damage
LGBTQ+	Lesbian, Gay, Bisexual, Transexual, Queer +
MENA	Middle East and North Africa
MERCOSUR	Southern Common Market
MNE	Multinational enterprise
NATO	North Atlantic Treaty Organization
NDB	New Development Bank
NDC	Nationally determined contribution
NPT	Non-Proliferation Treaty
NSA	Non-state actor
OSCE	Organization for Security Cooperation in Europe
PMSC	Private military security contractor
PPP	Public private partnership
RCEP	Regional Comprehensive Economic Partnership
R&D	Research and development
RDB	Regional Development Bank
RE	Renewable energy
RFA	Regional Financial Agreement
RMB	Renminbi
RTA	Regional Trade Agreement
SCO	Shanghai Cooperation Organization
SDG	Sustainable development goal
SME	Small and medium enterprise
SOE	State owned Enterprise
SSA	Sub-state Authority
TTIP	Transatlantic Trade and Investment Partnership
UAE	United Arab Emirates
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNSC	United Nations Security Council
USSR	Union of Soviet Socialist Republics
WB	World Bank
WHO	World Health Organization
WTO	World Trade Organization
WWW	World wide web



## LIST OF FIGURES

Figure 1 Essential uncertainties	13
Figure 2 Uncertainty dashboards as scenario skeletons	17
Figure 3 Economic growth per annum for each World Scenario	19
Figure 4 Growth path, size, and composition of the global economy in 2030 per World Scenario	20
Figure 5 Ratio of intra-regional trade in the global economy for each of the World Scenarios	20
Figure 6 Ratio of world trade in the global economy and of intra-regional trade in global trade	21
Figure 7 Evolution of global governance through 2030 for each of the World Scenarios	24
Figure 8 Size and composition of the global economy in the Drifting World Scenario	28
Figure 9 Size and composition of the global economy in the Shifting World Scenario	38
Figure 10 Size and composition of the global economy in the Rising World Scenario	46
Figure 11 Size and composition of the global economy in the Flowing World Scenario	56



## LIST OF TABLES

Table 1 Per capita income in 2030 compared to 2020 for each World Scenario	18
Table 2 Discussion matrix	23
Table 3 General description of Global Governance Scenarios	64



# 1 FOREWORD

This “Preliminary Report on Future Global Governance Scenarios” is the first deliverable within Work Package 9 “Foresight exercises and scenario-building” of the Horizon 2020 project GLOBE (Global Governance and the European Union: Future Trends and Scenarios). The objective of this Work Package is to create four scenarios for the world in 2030 (and then project out to 2050) that can help policymakers prepare for the future of global governance by exploring possible outcomes of the dynamics that we witness today and the uncertainties around them.<sup>1</sup>

A number of methodological notes are of importance. First, importantly, the scenarios developed in this preliminary report do not confine themselves solely to global governance but explore key contextual factors and dynamics affecting how the world could evolve. These provide a basis to consider future possible situations of global governance. Following standard best practices in scenario-building,<sup>2</sup> the process used to develop this report is:

- 1) identify key premises and uncertainties (with emphasis on those broadly relevant for global governance);
- 2) develop broad Scenarios for the World in 2030; and
- 3) incorporate a Global Governance component to achieve the final Global Governance Scenarios.

In developing this final component, we have paid particular attention to the four issue areas researched in depth in the GLOBE project, namely, trade & development, security, climate change, and finance (issue areas studied in WP3, WP4, WP5 and WP6). Second, the preliminary report presented here focuses on scenarios to 2030. In the subsequent phases of this Work Package, which includes consultations with stakeholders and experts (described below), the 2030 scenarios will be projected out to produce the Global Governance scenarios for 2050.

Third, in order to develop a sound set of World and Global Governance scenarios, we have also built upon a strong base of existing GLOBE research, as well as on consultations with GLOBE partners and the GLOBE International Advisory Board (IAB). Regarding the latter, in selecting the uncertainties which became the building blocks of the World Scenarios, we have consulted with the GLOBE project coordinator and the leaders of WPs 3-6 (September 2020). We also consulted with members of the IAB and all GLOBE partners, in June 2021, to gather

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<sup>1</sup> As stated in the Description of Action, WP9 seeks to “identify scenarios for the future of global governance to provide the EU with insight as to the possible evolution of global governance in general, and the four issue areas studied in particular. The main aim of creating these scenarios is not to predict the future, but to produce a framework to use to analyze future risks and opportunities. This analysis will be converted into recommendations and strategies for EU policymaking in WP10.”

<sup>2</sup> For instance, the National Intelligence Council of the US, which regularly conducts scenario exercises, noted in the latest issue that it “construct[s] its analysis of the future in several stages. First, we examine structural forces in demographics, environment, economics, and technology that shape the contours of our future world. Second, we analyze how these structural forces and other factors—combined with human responses—affect emerging dynamics in societies, states, and the international system” (Office of the US Director of National Intelligence, March 2021).



insights and contributions to build the Global Governance Scenarios from the initial World Scenarios.<sup>3</sup>

Regarding existing GLOBE research, we incorporated insights from WPs 3-8 while constructing the Global Governance component of this report. The mapping exercises and case studies in these WPs added a deep understanding of the current state of affairs in Global Governance and enabled us to select key global governance actors relevant to our analysis.

WPs 3-6<sup>4</sup> provided an in-depth look at the governance and institutions in each of the issue areas. Based on these, we constructed an initial global governance matrix. The matrix contained the most relevant governance actors organized by issue area and actor type, and it served as a snapshot of the present. Many of the papers in WPs 3-6 furthermore signalled ongoing trends in specific global governance fields that we took into account in developing the Global Governance Scenarios.

We furthermore incorporated, based on WPs 7-8,<sup>5</sup> important trends, shortcomings, and cross-cutting issues related to global governance. The work of WP 2 was also relevant in this regard, with the sentiment analysis contributing towards our understanding of the current context. All of this existing research provided a strong foundation to construct future matrices for each of the scenarios. We reflected on the issues, trends and shortcomings identified to determine how these would evolve in the different scenarios.

Going forward, the contributions from this report will be discussed with European Union (EU) stakeholders, further experts, and consortium partners during fall 2021 and early 2022. Building on these discussions, the team leading WP9 will then finetune the Global Governance Scenarios. Once the scenarios have been scrutinized and finetuned, incorporating insights from the discussions with consortium partners and EU stakeholders, they will be projected out linearly 20 years into the future, to 2050. In order to achieve this projection, the scenarios must be thoroughly coherent and need to have undergone a rigorous examination. The final output of WP9 will be the “Future of Global Governance Report for the Years 2030 and 2050”. GLOBE’s WP10 will subsequently build on the scenarios to develop strategy implications for the EU.

In the pages that follow, we first present [a short introduction](#) to the use of scenarios and the process of their development, including an overview of the premises and uncertainties that underlie the scenarios. We then provide a [summary of the four World Scenarios](#) constructed, along with an illustrative comparison of the implications of these scenarios for the global economy and for trade. In the fourth section, we describe the process that allowed us to develop the Global Governance component of each scenario and then include a brief

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<sup>3</sup> As stated in the project proposal: “The foresight exercises and scenario building will be conducted in close cooperation with stakeholders to ensure accuracy and relevance. The WP leader will establish a detailed procedure to elaborate plausible, sound and relevant future scenarios for global governance and will consult regularly with a Scenarios Evaluation Committee, which will include a member from each of the project participants, other relevant experts in this field, and members of the project’s International Advisory Board.”

<sup>4</sup> Marx et al., 2020; Broude & Haftel, 2020; Wouters et al., 2020; Sánchez Cobaleda, 2020; Sánchez Cobaleda et al., 2020; Kreienkamp & Pegram, 2020; Levi-Faur & Blumsack, 2020; Nemiña & Espinosa, 2020; Apaydin & Roger, 2020

<sup>5</sup> Tokhi & Ebetürk, 2020; Otteburn & Marx, 2020

summary of the four Global Governance Scenarios. The last section includes the full narrative of the scenarios covering both the World and Global Governance components.

Finally, the annexes to the document feature (i) the full [detailed description of uncertainties](#) that act as building blocks for the scenarios; (ii) the [detailed matrix](#) with specific sample questions per issue area used for the June 2021 discussion with IAB members and consortium partners, (iii) & (iv) an [overview of the consultations with the IAB](#) and [GLOBE partners](#), and (v) the [matrices detailing the institutions per scenario](#) for each issue area.



## 2 THE USE OF SCENARIOS

Our remit in WP9 is not to predict the future, as that would be beyond the scope of any kind of serious social science research. Instead, we want to identify drivers of change and how their evolution can shape the future. Scenarios allow for imagining different futures, as an extrapolation of, or divergence from, tendencies present today. Rehearsing responses to such futures can help policymakers to develop more anti-fragile policies and resilient institutions to navigate uncertainty. In doing so, scenarios can increase understanding of emerging opportunities and help with the responses to them.

As one of the organizations that has done most to develop and use scenarios, Shell points out how scenarios allow to “stretch” one’s thinking:<sup>6</sup>

*“We have been developing possible visions of the future since the early 1970s . . . scenarios ask “what if?” questions encouraging leaders to consider events that may only be remote possibilities, and stretch their thinking” (Shell, n.d.-a). Scenarios are “plausible and challenging descriptions of the future landscape. They stretch our thinking and help us to make crucial choices in times of uncertainty and transitions as we grapple with tough energy and environmental issues.” (Shell, n.d.-b)*

The OECD’s Strategic Foresight Unit justifies the use of scenarios for governance work as follows:

*“In times of increasingly rapid change, growing complexity, and critical uncertainty, responsible governance requires preparing for the unexpected . . . The objective is not to ‘get the future right’, but to expand and reframe the range of plausible developments that need to be taken into consideration.” (OECD, 2018)*

### 2.1 Identifying premises and uncertainties

The scenarios represented in this report do not search for ‘black swans’; rather, they are created through the combination of two sets of considerations: premises and uncertainties. Premises are overarching drivers of change that serve as a foundation for the analysis of uncertainties. These premises are shaping the world right now and they convey a measure of certainty about the future. To illustrate this, consider demographic change, one of the premises identified in this report. We know with a degree of certainty how demographics will evolve. That is, we know what the overall demographic evolution of the world or the evolution of demographic pyramids in high-income and low-income countries will look like. This is the element of certainty contained in the premise. We do not, however, assume that all aspects related to demographics are certain. For example, we do not know how governments will cope with these situations or whether social dynamics will change as populations age or get younger. These latter questions, implying uncertainty, associated with the demographic

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<sup>6</sup> In business, scenarios are used to explore the “plausible” focusing on “ways that the broad contextual environment might unfold and then on how it might impact the [business] environment. (Ramirez & Wilkinson, 2016)

premise are covered in the uncertainty we name “Social dynamics”. We have identified three premises that are relevant for this report:

- **Demographics:** Ninety per cent of the people who will inhabit the world of 2030 – and the majority of those who will live in 2050 – have already been born, so there are some solid facts underpinning this premise. There are unprecedented differences in terms of demographic structures between countries (largely reflecting differences in fertility rates) – generally with high-income countries having aged demographics and low-income countries having young demographics. As mentioned, further down, our identified uncertainty 4.1 “Social dynamics” considers open questions such as how in-country policies will manage these different situations, how much migration will take place, and in what patterns. Questions on how the corollaries of this premise are handled are explored in [Annex 1.2.2](#) and [Annex 1.2.3](#).
- **Digitalization:** The trend that started in earnest with the personal computer and the Internet has been buttressed by pervasive connectivity and seems certain to continue to gather momentum. It has already changed societies around the world in many aspects – from business to social interaction – and it still has a great deal of transformative potential. While the Internet of Things (IoT), Artificial Intelligence (AI), Virtual Reality (VR), and other components of the digital world are already present, there are considerable unknowns— that we cover in uncertainty 3.1 “Digital transformation”—around the pace of their adoption and spread, as well as the societal interventions affecting them. For a more in-depth look at questions related to digital technologies and manufacturing technologies, see [Annex 1.3.1](#) and [Annex 1.3.2](#) respectively. For an exploration of the corporate landscape, digital innovation, and the power of technological giants, see [Annex 1.3.3](#). Further, for a more complete look at the interplay between digital technologies and privacy protection, see [Annex 1.4.1](#). Finally, in [Annex 1.4.2](#) you can also find a description of the relationship between social media and social dynamics.
- **Climate change:** the Damocles’ sword hanging over humankind is becoming more pressing with time. There is no denying the human influence in this matter – as of today, the anthropogenic component of climate change is unequivocal – and its inexorable march. Despite some remaining doubters, there is ample evidence of long-standing implications for weather patterns (hence farming), sea levels (and coastal livelihoods) and even global health. The long-term implications are massive, and they affect both policy and individual choices. It is clear that every year that passes without decisive action (including both mitigation and adaptation) worsens the disastrous prospects. The uncertainty we identified further down as 4.3 “Climate action” is directly related to this premise. For a deeper understanding of questions related to climate change and climate action, see [Annex 1.4.3](#).

With the three major premises in mind, we then identified essential uncertainties representing drivers of change that could shape the path of the world to 2030. These uncertainties were specifically chosen as building blocks for a set of 2030 World Scenarios that would allow us to explore different Global Governance situations. To identify the relevant uncertainties, we considered four dimensions or axes: international; national; corporate (including technology); and social. For each of these dimensions we then selected three uncertainties that are likely to have a great impact in the future.

For example, along the social axis of uncertainty, and related to the premise of climate change, we selected climate action as an essential uncertainty. Considering the profound impact climate change will have on virtually every aspect of human life and taking into account the burst of support for environmental movements as well as the implications of “walking the talk” for governments, businesses, and consumers alike, we can see how relevant the climate action uncertainty is. The implications of this uncertainty are wide-ranging, including possible changes in political positions and voting behaviour, individual consumption patterns, the accountability of businesses or burden-sharing across countries. Similarly, in relation to the digitalization premise and along the corporate axis of uncertainty, we identified the scope and pace at which digital and manufacturing technologies spread as essential uncertainties. Some of the implications associated with this uncertainty include the effect of automation on labour markets and social dynamics, or whether small and medium enterprises (SMEs) will be able to benefit from automation and digitalization to the same extent that big corporations can, considering the cost and hurdles of adoption.

In all, we have identified a dozen essential uncertainties of relevance to our focus on global governance. They revolve around the four dimensions, summarized in Figure 1. Note that it is impossible to select all the uncertainties that could affect our polities and their path to the future. Hence, we have tried to be as comprehensive as possible and, at the same time synthetic. The dozen uncertainties represent a compromise between these two objectives, as fewer would unduly reduce the complexity of the analysis, and more would make it hard to manage for our purpose.

*Figure 1 Essential uncertainties*

<b>International</b>	<ul style="list-style-type: none"> <li>▪ Intergovernmental dynamics</li> <li>▪ Superpower dynamics</li> <li>▪ Financial dynamics</li> </ul>
<b>National</b>	<ul style="list-style-type: none"> <li>▪ Economic structure</li> <li>▪ Government expansion</li> <li>▪ Domestic powers</li> </ul>
<b>Corporate</b>	<ul style="list-style-type: none"> <li>▪ Digital technology</li> <li>▪ Manufacturing technologies</li> <li>▪ Corporate landscape</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>▪ Privacy protection</li> <li>▪ Social dynamics</li> <li>▪ Climate action</li> </ul>

Having identified the relevant uncertainties and premises, we look at how they interact with each other and how they might evolve. For example, a crucial uncertainty at the national level, particularly after the COVID-19 crisis, is whether the expansion of the intervention powers and expenditure margins of states will continue, or whether we will see the state retrench. Demographic trends such as the progressive ageing of the population will need to be factored in in this analysis, as they will result in increasing dependency ratios and the need for more social spending. Similarly, whether governments dedicate enough resources to alleviating

climate change may depend to a certain extent on intergovernmental dynamics. If relations between countries are tense, cooperation on climate change might be adversely affected, with other issues taking precedence.

Importantly, like climate change, the spread of COVID-19 has had a massive impact on most aspects of human life, and we can therefore not ignore its lingering effects in this report. Whilst COVID-19 was not identified as a premise or uncertainty in our initial conceptualization, we subsequently incorporated insights from the pandemic transversally into our analysis and have reflected on the possible recovery paths on the way to 2030. These paths are reflected in some of the World Scenario narratives, see [section 5](#). This has also impacted our construction of the Global Governance component. For instance, we considered how the economic impact of COVID-19 could reduce appetite for green financing in some scenarios, ultimately affecting the intensity of climate action. We also considered how different possible recovery paths from the pandemic have important implications for the relations between the countries in the Global North and Global South, and thus for cooperation in areas other than health, at the international level.

The twelve essential uncertainties are described, in [Annex 1](#), through a series of notes organized in four sections. First, a description of the nature of the uncertainty and its relevance for the future. Second, a more detailed explanation of the different determinants of change contained in each uncertainty. Third, a description of the two end points bounding a continuum of the possible – and plausible – outcomes for each uncertainty endpoint. The fourth section covers the process that helped us start to move from the World Scenarios and their implications to the Global Governance components of each scenario. This section relates with the work of GLOBE WPs 3 to 8, as it relies on research carried out there, particularly on trade and development, security, climate change, and finance. In the fourth section, the global governance implications of the uncertainty are explored.

## 2.2 From premises and uncertainties to World Scenarios 2030

The twelve uncertainties described above interlock and intersect to create the World Scenarios for 2030. We have labelled these four scenarios, as shorthand, with one word: Drifting; Shifting; Flowing; and Rising.

In the construction of each World Scenario, we seek internal coherence: compatible ways in which the various uncertainties are resolved by 2030. Even with just a dozen uncertainties, it would be possible to develop a multitude of internally coherent scenarios, but experience clearly shows that three or four scenarios are the most useful set to develop. Within the set, we look for our scenarios to be clearly differentiated, so that they provide the basis for divergent explorations of the future – in line with the specification for WP9 in GLOBE.

We commence the construction of the World Scenarios by combining different outcomes for each uncertainty. Each uncertainty is characterized through a continuum of the possible end-point outcomes for 2030 (see dashboards in [section 3.1](#)). For instance, intergovernmental dynamics, one of the uncertainties identified in the international dimension, can be characterized as ‘tense’ on one end-point, and ‘fluid’ on the other (although it can also take values somewhere in between). Thus, each scenario is shaped by a different combination of

outcomes to the twelve uncertainties. Additionally, the relative importance of the uncertainties in shaping each scenario varies.

While the description of the uncertainty and its continuum of possible outcomes is a markedly analytic task, combining different uncertainties' outcomes to build scenarios is a creative task in nature. Hence, in building the scenarios it is important to base them on analyses of the factual starting point; then rationality applies when discarding incompatible combinations, and creativity is applied to build a thought-provoking and diverse set of scenarios.<sup>7</sup> To do this, we first combine the uncertainties at the different poles and discard combinations that are implausible. Once we arrive at a set of plausible combinations, we explore plausible but counterintuitive possibilities to ensure we arrive at a diverse set of scenarios that is also as comprehensive as possible. We furthermore value scenarios being sufficiently different from one another to merit a separate analysis. The model and the scenarios were subjected to an iterative process of expert consultation and evaluation which allowed us to revise and finetune the scenarios at each round. The dashboards in [section 3.1](#) indicate, for each World Scenario, where each uncertainty is positioned on the outcome continuum; they can be used as a skeleton description of each World Scenario.

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<sup>7</sup> Uncertainty surrounds us—and the experience of recent years shows it is easier to underestimate than overestimate it. <https://dobetter.esade.edu/en/uncertainty-future>





### 3 BRIEF DESCRIPTIONS OF FOUR WORLD SCENARIOS

The following section contains very brief descriptions of the four World Scenarios. For a more complete version of these scenarios, with the Global Governance component incorporated, please see [section 5](#).

#### *Scenario 1: Drifting*

This is a world driven by super-power dynamics that is sharply divided into two antagonistic spheres of influence: China's and the US'.

By 2030, the geopolitical divide has deepened, international cooperation remains scant, and barriers to trade and financial flows have continued to grow. Policy decisions and geopolitical stances in powerful countries have created a downward spiral with major consequences for the pace and inclusiveness of growth. Consumer confidence has been at rock bottom for years, and basic forms of savings – notably gold – are preferred. Business confidence – and investment – is also very low, not least because high public debt levels have crowded out access to finance in many countries. Nationalism is on the rise, fundamental rights have been restricted, and steps to mitigate climate change have slowed.

#### *Scenario 2: Shifting*

This is a scenario characterized by instability, distrust, and tension, where the spectre of authoritarianism looms large.

In this world of shifting boundaries, many widely held assumptions about the future have been shaken as the world's bipolar superpower structure never took hold, shifting alliances became the norm, and manufacturing technology reshaped labour markets, supply chains and productivity dynamics. Government interactions with businesses and with assertive, vocal, and restless citizens have also been reshaped by the expansion and perils of digitalization. Democratic backsliding is increasing, and overall, uncertainty is high, given unstable regulatory waves and international alliances.

#### *Scenario 3: Rising*

In this scenario, market actors have emerged as champions and the pursuit of economic growth has taken precedence over all other considerations.

The rising tide in this world is due to recognition – after costly experiments with restrictive policies – of the benefits of collaboration, open markets, and competition. Large corporations and mega cities have increased their clout and provided a solid basis for rapid technological adoption, productivity, and economic growth, creating, in turn, the fiscal space for determined climate action. The price of the rapid economic growth has been the continued rise in income inequality in many countries and a greater divide between urban and rural areas – both factors fuelling unhappiness.





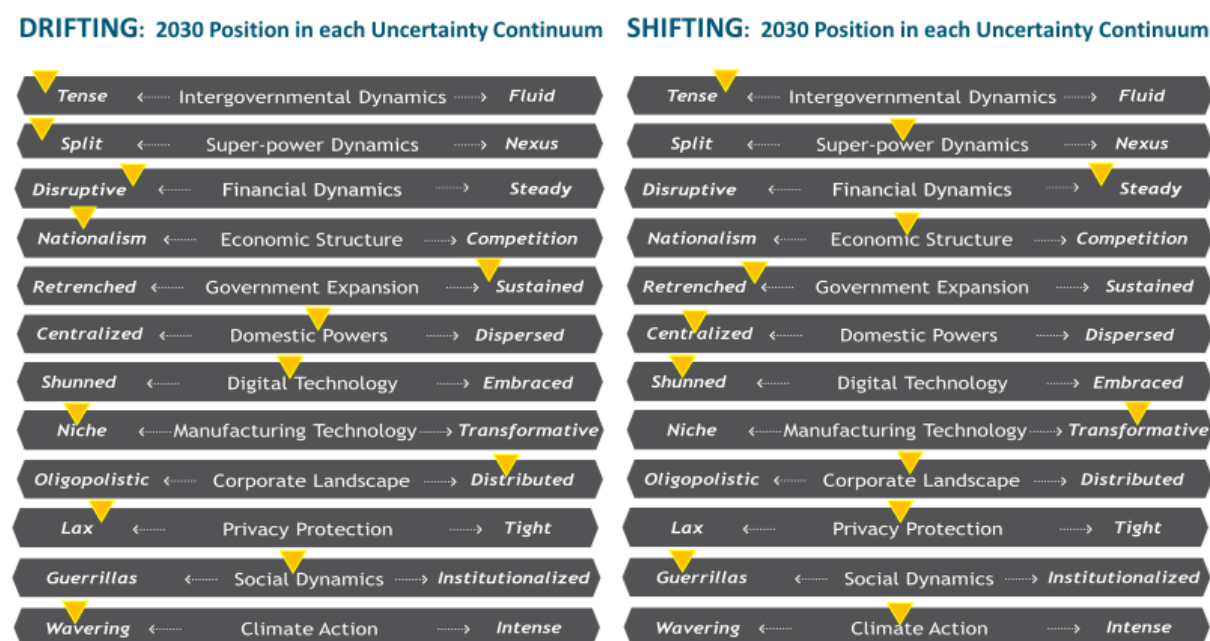
## Scenario 4: Flowing

In this world that is a flowing ensemble, international relations are no longer contentious, and confrontations have become rare.

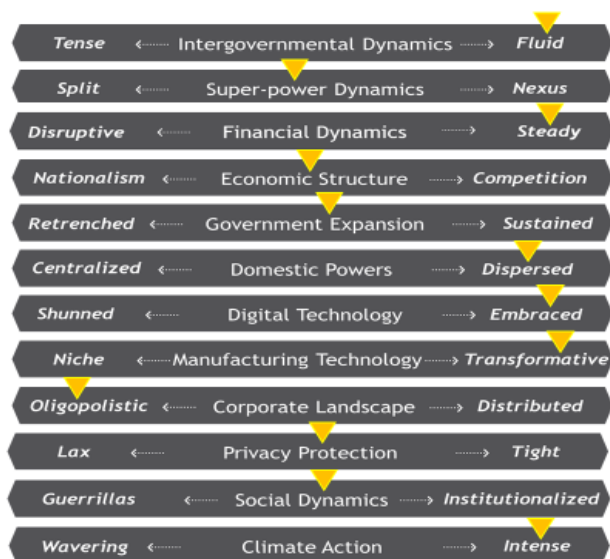
As the situation evolves from bipolarity to multipolarity, progress is made, including some trial-and-error attempts, to create new platforms for global dialogue and cooperation. US administrations are involved in these new platforms but with limited enthusiasm, as international engagement is hard to treat as a priority in an ever-polarized and fractious domestic political situation. Both inter-country and intra-country inequalities have been reduced, and public expenditure overall is on the rise. Domestic politics in many countries now address citizen demands for more participatory processes, and for privacy protection, even if it comes at the expense of convenience and productivity.

### 3.1 Uncertainty dashboards as scenario skeletons

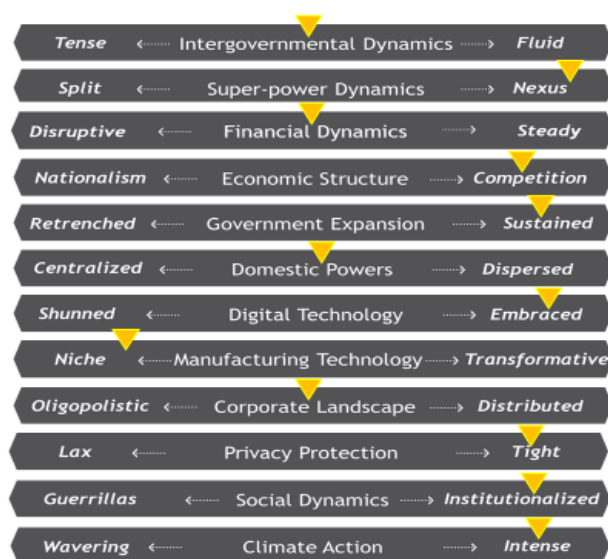
Figure 2 Uncertainty dashboards as scenario skeletons



### RISING: 2030 Position in each Uncertainty Continuum



### FLOWING: 2030 Position in each Uncertainty Continuum



## 3.2 Illustrative comparison of economic implications

The uncertainties that shape the World Scenarios combine to produce different implications – which are described in the individual scenario narratives. As illustrated below, rough estimates of economic outcomes can also serve to illustrate the differences across scenarios. The economic indicators below are purely illustrative; they are a translation, into quantitative terms, of the logic of each scenario. Some of the illustrative economic impacts flow directly from assumptions in scenarios. For instance, China's pace of economic growth suffers in the scenario which incorporates a financial crisis originating there. Some other economic impacts are based on expected relationships between key developments or features of the scenarios. For example, trade restrictions emerging from geopolitical tensions are assumed to impact growth negatively, and depending on the characteristics of each scenario, they affect overall trade growth and/or the intra-regional share of trade.

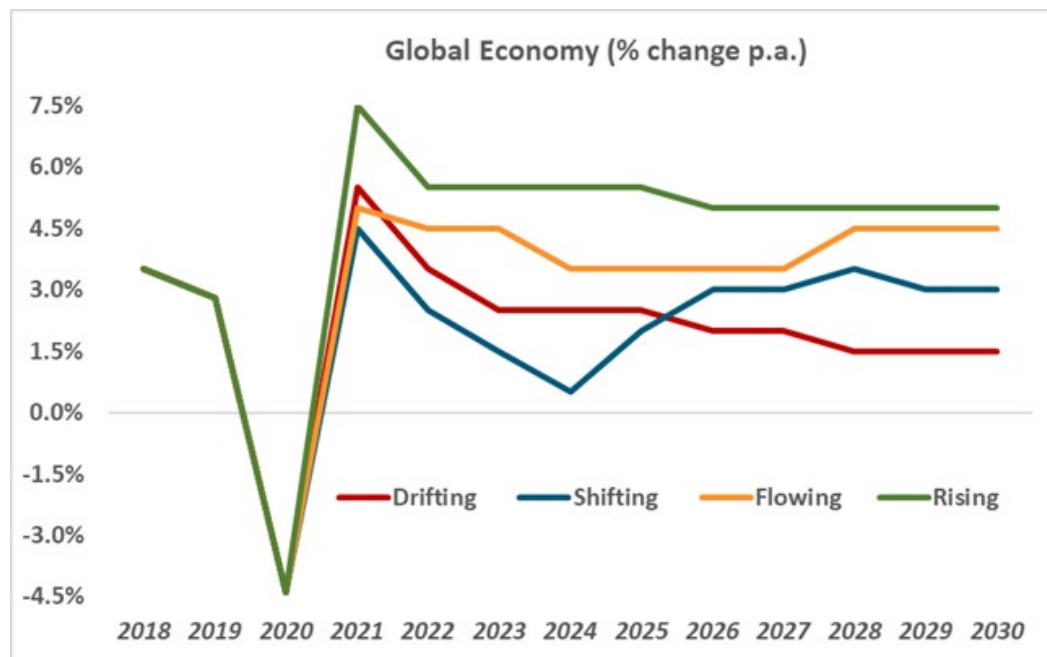
We use per capita income and two charts with views of the economic situation in 2030 for the purpose of comparison. The charts and tables use World Bank (WB) baseline data for 2020, where the different scenarios produce different cumulative growths by 2030: from 54% (which approximately is equivalent to an annual growth of 4-5%) to a meagre 15% (representing a 1-2% annual growth). Moreover, the trendlines follow the narratives described in the scenarios, hence not assuming linearity.

Table 1 Per capita income in 2030 compared to 2020 for each World Scenario

	<i>Drifting</i>	<i>Shifting</i>	<i>Rising</i>	<i>Flowing</i>
2030 per capita income	<b>\$13,113</b>	<b>\$13,350</b>	<b>\$17,362</b>	<b>\$15,362</b>
compared to 2020	115%	117%	152%	134%

The world's 7.7 billion people in 2019 had an average per capita income of \$11,430. In 2030, population projections estimate that there will be 8.5 billion of us. In our Flowing world, average per capita income will increase to \$15,362, while in the Shifting scenario, per capita income will grow by half that and reach just \$13,350. As table 2 shows, Drifting and Rising are even further apart.

Figure 3 Economic growth per annum for each World Scenario



The figure above shows how each World Scenario would affect economic growth between now and 2030 and provides an indication of the prospects for growth over the longer term. Rising is the fastest growing scenario all along and offers the best prospects for the rest of the 2030s, with Flowing having a similar path, though at more moderate growth rates. Shifting shows weaker growth than Drifting over the next few years, but its prospects for *longer-term* growth look considerably better than those of Drifting.

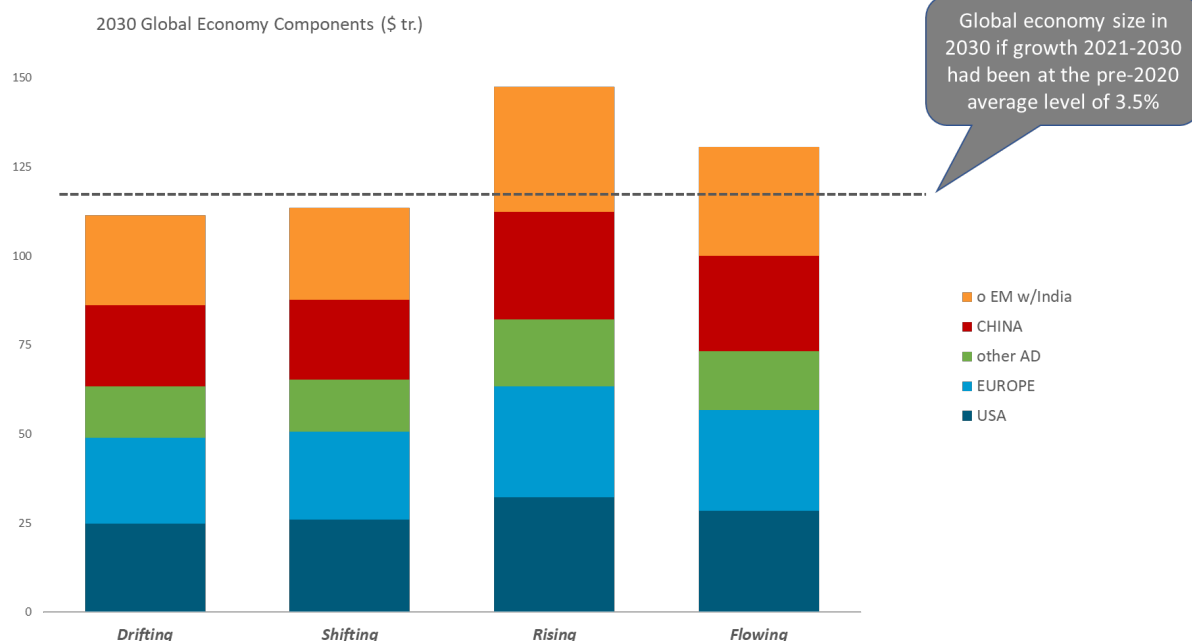
Differences in real gross domestic product (GDP) growth rates across our four scenarios may not seem very impressive but they become clear when considering what the cumulative impact could be over a dozen years. When it comes to the size of the global economy in 2030, the gap between the lowest growth scenario (Drifting) and the highest growth scenario (Rising) is \$37 trillion.

For perspective: \$1 trillion is the size of the whole economy of Indonesia or Mexico, and all of the countries in the world, except these two plus 14 others, have a GDP below \$1 trillion. With \$1 trillion, you could buy all the new cars sold in the world in half a year ... or all the airplanes sold by Airbus and Boeing combined over five years.

The figure below shows an illustrative growth path and the size of the global economy, along with its composition (spotlighting China, USA and three country groupings: Europe; other

Advanced Economies; and other Emerging economies – including India) to reveal the overall pace of economic growth and its centres of gravity.

Figure 4 Growth path, size, and composition of the global economy in 2030 per World Scenario



Finally, the following three graphs illustrate the development of global and regional trade in the four scenarios. The ratio of trade in the world economy and the share of regional trade flows in total international trade serve to illustrate the direction and components of globalization.

Figure 5 Ratio of intra-regional trade in the global economy for each of the World Scenarios

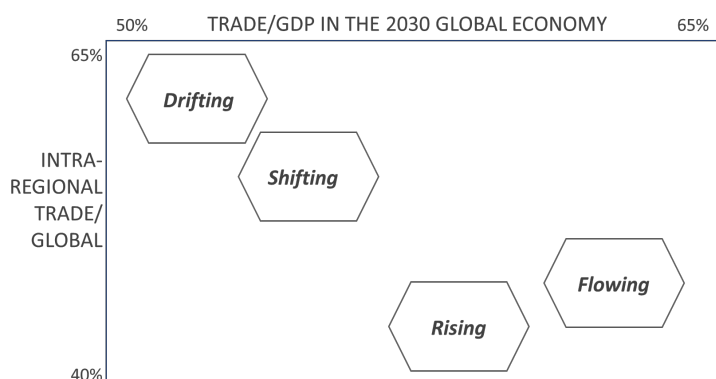
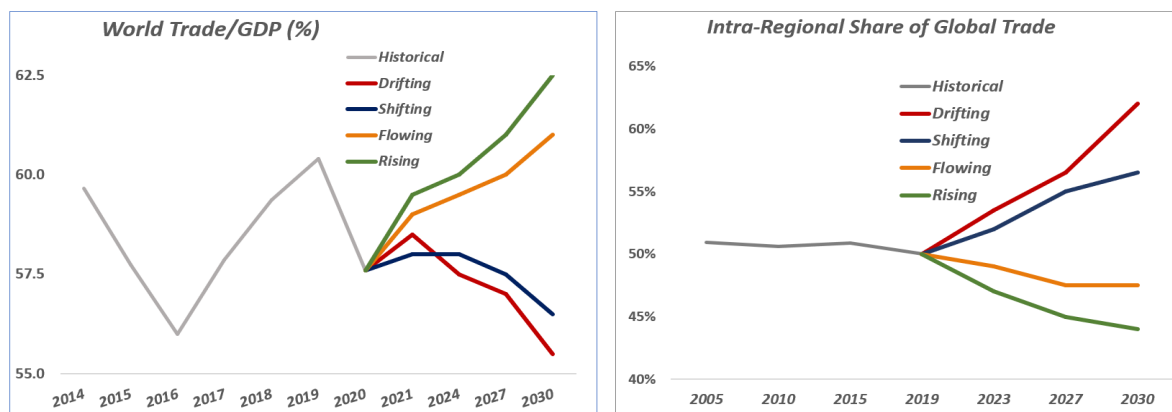


Figure 6 Ratio of world trade in the global economy and of intra-regional trade in global trade



## 4 FROM WORLD SCENARIOS TO GLOBAL GOVERNANCE SCENARIOS

The final stage in this exercise of scenario development was to incorporate the Global Governance component into the Scenarios. The aim was to look deeply into what global governance may look like in each one of the World Scenarios. By focusing in particular – but not only – on the four issue areas studied in GLOBE, we aimed to explore, among others, what the governance architectures will look like in terms of centralization or fragmentation, what institutional designs may have proliferated, and what institutions may be dominant.

To identify the relevant formal and informal intergovernmental organizations, as well as key non-state and hybrid actors, we drew from the output of GLOBE WPs 3-8 (Marx et al., 2020; Broude & Haftel, 2020; Wouters et al., 2020; Sánchez Cobaleda, 2020; Sánchez Cobaleda et al., 2020; Kreienkamp & Pegram, 2020; Levi-Faur & Blumsack, 2020; Nemiña & Espinosa, 2020; Apaydin & Roger, 2020; Tokhi & Ebetürk, 2020; Otteburn & Marx, 2020) and constructed four matrices with different actor types per issue area. These matrices reflect the current state of affairs in Global Governance for each of the issue areas, as well as sources of tension and future trends that we took into account in our analysis, in combination with the World Scenarios. We supplemented the initial matrices with a review of additional literature and gathered a final selection of institutions and non-state actors to present to GLOBE partners and the IAB in a discussion round. The objective of this discussion round was to gather insights from experts about the possible development paths of these actors in each of the World Scenarios. The below matrix helped us organize the discussion and gather the insights of experts and colleagues. The intent was to reflect on these questions for each of the issue areas studied in GLOBE: trade & development, security, climate change, and finance.

With the output from the discussions, and insights from the literature reviewed, including WPs 3-8, we derived the four Global Governance scenarios, described in brief in [section 4.1](#) and at length in [section 5](#):

- Regressive Global Governance in a Drifting World
- Disjointed Global Governance in a Shifting World
- Incremental Global Governance in a Rising World
- Transformative Global Governance in a Flowing World

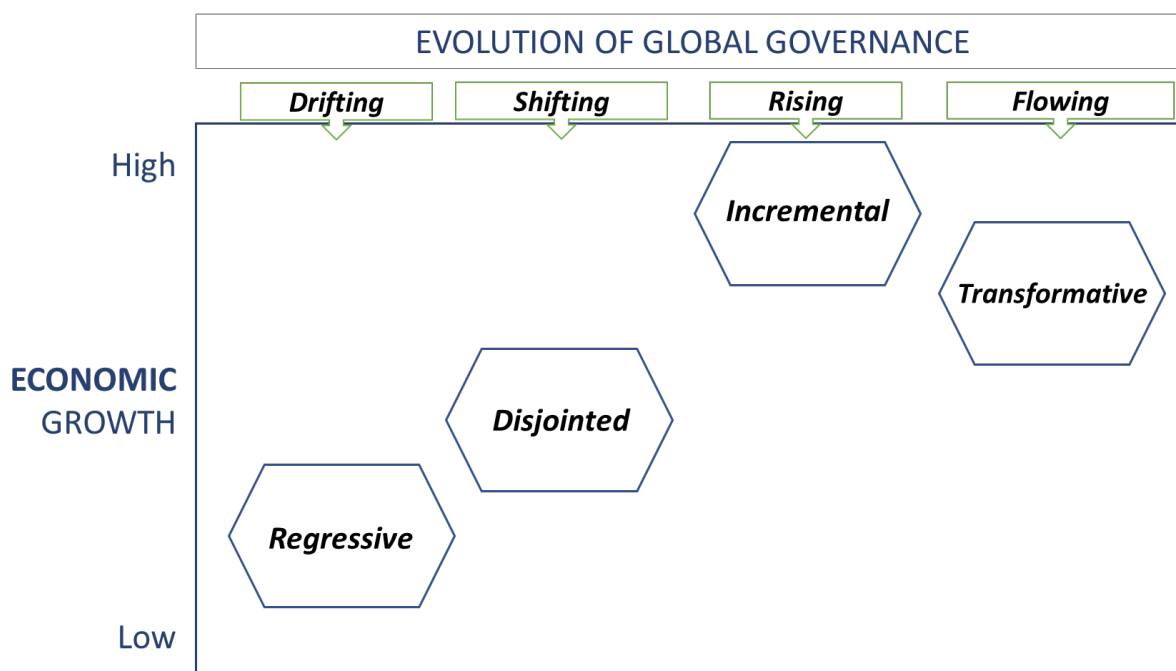


Table 2 Discussion matrix

	DRIFTING	SHIFTING	RISING	FLOWING
What <b>formal <i>global</i> intergovernmental organizations</b> characterize this world? What is their level of authority, legitimacy, ...?				
What <b>formal <i>regional</i> intergovernmental organizations</b> characterize this world? What is their level of authority, legitimacy, ...?				
What <b>informal intergovernmental organizations</b> are relevant in this world? What are their main roles? How do they relate to other types of organizations?				
What is the role of <b>sub-state and non-state actors (public and private)</b> in global governance in this world? What kind of organizations, networks and partnerships do they join and form? How do these relate to other types of institutions?				
Summarizing: What is the <b>overall shape</b> of the regime complex/governance architecture in this issue area? (e.g. hierarchy, fragmentation, specialization, ...)				

The figure below shows how the evolution of Global Governance relates to the World Scenarios and their economic implications. The x-axis shows each of the World Scenarios: Drifting, Shifting, Rising, Flowing. The y-axis illustrates the economic implications of each scenario, measured as the level of economic growth. The economic situation is also determined by the overall geopolitical and societal dynamics of the scenario, in combination with other drivers of change. Importantly, the chart shows that the scenario with the highest economic growth does not necessarily coincide with the one where there is most effective global governance.

Figure 7 Evolution of global governance through 2030 for each of the World Scenarios



We clearly see that in Drifting, the very poor state of international relations will impact almost every aspect of Global Governance (GG), resulting in a regression from the current state of affairs. Conversely, in Flowing, a new spirit of cooperation, reinforced by positive experiences, has opened the doors for the reactivation of IOs' activities and for the emergence of new institutions and processes – both formal and informal. This leads to a scenario where global governance is transformative. While Rising is more prosperous in economic terms, the heightened role of large corporations and cities will have an important impact on the evolution of GG. In Shifting, finally, it is regionalization and other fluid alliance dynamics that influence the shape of GG.

[Annex 2](#) in this document contains a detailed matrix with more specific sample reflection questions per issue area, and [Annex 3](#) and [Annex 4](#) include a summary of the consultations with the IAB and GLOBE partners.

## 4.1 A Brief Description the Global Governance Scenarios

We here include a brief description of the Global Governance components in each scenario. In the next section, we describe in detail each one of these within their respective World Scenarios. See also Annex 5 for summary matrices showing the evolution of specific institutions for each issue area in each one of the scenarios.

### *Scenario 1: Regressive Global Governance in a Drifting World*

This world is characterized by strong geopolitical competition between China and the US, and tense intergovernmental relations. Global governance has regressed and has become



extremely fragmented. Global or transcontinental formal intergovernmental organizations have reoriented their activities towards one of the geopolitical blocs or have ceased to exist. The International Monetary Fund (IMF) and the World Bank now operate in the US sphere, whilst the new Asian Monetary Fund (AMF), has replaced them in the Chinese sphere. The G20 has ceased to meet as the divide is such that multilateral cooperation across blocs is not possible.

The difficult intergovernmental relations and the dire economic situation have pushed climate change to the back burner, and almost no climate action takes place. The turn towards protectionism has left the World Trade Organization (WTO) in shambles, although regional organizations have made efforts to encourage intra-regional trade. International financial governance has become much more fragmented, informal and minilateral, and the potential for dangerous financial innovation exists. Finally, in the security domain the United Nations Security Council (UNSC) is completely deadlocked, two security spheres divide the world, and cybersecurity and migration have emerged as important challenges.

See [section 5.1](#) for a full description of this scenario.

### *Scenario 2: Disjointed Global Governance in a Shifting World*

In this world conflict abounds and alliances shift continuously. Tense intergovernmental relations have resulted in a generalized distrust of multilateralism and a shift towards regionalism, minilateralism and ad hoc frameworks. This is a state-centred world, where most of the traditional intergovernmental organizations have lost much of their authority and legitimacy. International cooperation is almost non-existent, with the notable exception of the realm of finance, where the Chinese financial crisis in 2023 enabled modest international cooperation at a technocratic level.

There is little climate action in a Shifting world, and the United Nations Framework Convention on Climate Change (UNFCCC) is largely ineffective in bringing together states to negotiate and cooperate. There are some initiatives, however, at the regional and national levels, albeit superficial ones. Trade has become much more regionalized and development IOs suffer serious budget constraints and legitimacy deficits. Separate financial regional orders have continued to evolve, with limited linkages and coordination between them. The pervasive instability has spurred a plethora of security challenges, from warlords in failed states to cyberattacks and democratic backsliding in the West. Private security actors have gained much relevance in this context.

See [section 5.2](#) for a full description of this scenario.

### *Scenario 3: Incremental Global Governance in a Rising World*

Multilateralism has revived and cooperation has diffused to new areas, including financial regulation, climate change and health. Sub-state authorities (particularly megacities) and for-profit non-state actors, such as digital corporations or multinational enterprises (MNEs), have taken a greater role in global governance. Transnational private regulation has further



developed in a wide range of policy areas and in some it has even begun to replace state-centred efforts. Progress in this world is incremental, and for the most part the old formal intergovernmental organizations (FIGOs) have retained their influence, despite increasing contestation from emerging powers and low-income countries.

Megacities and the private sector are leading the energy transition, with the latter driving technological innovation. There has been a rapid development of renewable energy (RE) technology, but the high level of economic growth has also led to an increase in emissions. Hybridization processes are taking place in the realm of finance, with non-financial companies and fintech actors acquiring a greater role. Regional differences begin to converge to some degree, although financial regimes remain separate, and cooperation is mostly informal. Trade has become truly globalized, and digital oligopolies have acquired much power internationally. Tech giants have acquired an outsized role in security governance as well, and so have other private security actors. Regional cyber-security efforts have emerged in this context, and data colonialism has become a reality.

See [section 5.3](#) for a full description of this scenario.

#### *Scenario 4: Transformational Global Governance in a Flowing World*

Global governance in this world is based on improved and strengthened multilateralism. Emerging powers are better incorporated into the global governance architecture. Traditional institutions have been reformed to adapt to the changing geopolitical landscape and new ones have been created to complement them. Trust in formal intergovernmental organizations has increased and the trend towards bilateralism has been interrupted.

Multilateral cooperation on climate change is thriving at the UNFCCC, which has undergone a process of hybridization that has allowed for the further inclusion of civil society organizations (CSOs), sub-state authorities (SSAs) and the private sector in climate governance. The trend towards protectionism has been reversed, and a more inclusive trade globalization is well underway. Whilst financial governance has become more inclusive, it remains fragmented and highly informal. The UNSC, on the other hand, has made progress and is now a more responsive organization. In addition, regional actors and civil society organization have become more involved in security governance.

See [section 5.4](#) for a full description of this scenario.



## 5 SCENARIO NARRATIVES

In what follows, we develop the narratives, which are descriptions of how the scenarios constructed in the previous sections could unfold. These descriptions are not intended as predictions and they are speculative in nature, part of a creative exercise to shed light on some of the possible shapes the future could take.

Importantly, the purpose of scenarios is to open a debate about them. By looking at a range of plausible and diverse outcomes, the reader can begin to reflect on their likelihood, implications, appropriate responses to the challenges they present, and on their desirability. Further, scenarios also help us explore the implications and possible responses to unexpected events that, though unlikely, may nevertheless occur. This will be the remit of WP10, which will offer concrete strategy recommendations in response to the challenges presented by the World Scenarios.

### 5.1 Drifting

*A world in which the geopolitical divide has deepened, international cooperation remains scant and barriers to trade and financial flows have continued to expand. Policy decisions and geopolitical stances in major countries have created a downward spiral with major consequences for the pace and inclusiveness of growth. Business confidence – and investment is also very low – not least because high public debt levels have crowded out private access to finance in many countries.*

The Cold War: a term from a world past that is now quite fitting again in this scenario – albeit now more economic than political or martial in meaning. Relationships between China and the US are at an all-time low, and the long lasting Xi Jinping has not met with the US presidents since 2025 and neither have top-level members of their administrations. Instead of an iron curtain, the two clearly distinguished worlds are separated by invisible, yet robust boundaries between spheres of influence which span across continents. This has greatly affected trade, which has both dropped as a share of global GDP and shifted towards intra-regional flows. Tensions rise not only between both blocs and their spheres of influence, but within those spheres, with only like-minded countries favouring some agreements, and a wide range of protectionist measures are deployed by most states.

The prolonged COVID-19 pandemic also had a great effect on economies around the world. Despite an initial strong recovery by China, the appearance of new strains of the virus forced more lockdowns, and the closure of many businesses hampered their growth. By 2030, consumer confidence has been at rock bottom for several years and basic forms of savings – notably gold – are preferred. In the context of generalized slow growth there have been only modest reductions of the income gap between advanced and emerging and developing countries. This slow progress on income convergence coupled with a disproportionate effect of the pandemic on emerging and developing countries and a long, uneven recovery period has further entrenched the North-South divide, with intergovernmental relations quickly souring after disputes over vaccine distribution. Domestic inequality (and perceptions thereof) has been reduced as incomes of the top 10% have disproportionately slowed their growth but this has not resulted in further reductions of the incidence of end-point poverty.

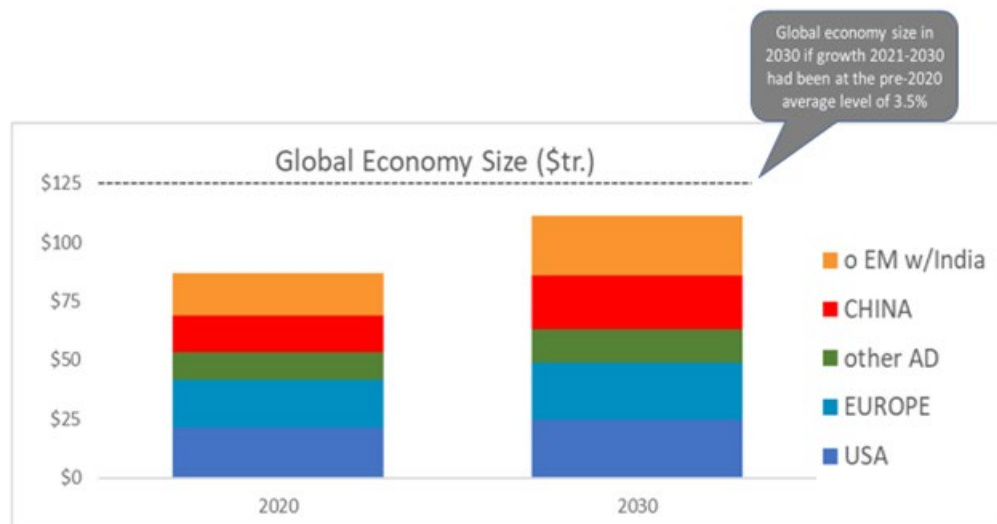


Many IOs have not recovered from the crises of legitimacy of the first two decades of the century and their effectiveness and efficiency have been seriously hampered. There has been a change of tendency, with countries adopting more nationalistic policies, leading to greater reluctance to cede any sovereignty to either regional entities or IOs. One exception lies in the regulation of transnational businesses, such as Big Tech corporations, which have faced stricter regulatory efforts across the globe. This is one of the areas where, despite heavy competition, and sometimes proxy confrontation, both China and the US have found common ground – though almost by serendipity.

The global economy in 2030 is about \$15 trillion smaller than it would have been had it grown between 2021 and 2030 at the pre-2020 average growth rate of 3.5% p.a. (indicated in the chart by the dashed line). Weak growth in most advanced countries and a gradual decline of growth in emerging countries accounts for the overall slowdown and the combined effect has also been small progress on income level convergence across countries, albeit with little progress on global per capita incomes in real terms which in 2030 are only 11% higher than in 2020 – a much weaker performance than in recent decades (in the 2010s, for instance it increased by 16%).

China appeared to thrive in the early 2020s, post-pandemic, but growth there and elsewhere weakens as protectionism, investment restrictions, and economic blocs reduce global efficiency and innovation. In that context manufacturing technology has not managed to contribute to productivity improvements – and China's decision in 2020 to launch a major effort on smart manufacturing proved largely disappointing.

Figure 8 Size and composition of the global economy in the Drifting World Scenario



Trade has grown even more slower than the sluggish global economy and trade patterns have shifted quite radically away from global flows (and supply chains) and towards segmentation reflecting the major geo-political blocs that by 2030 already resemble a commercial cold war. The value of trade has gone from representing a fairly stable 60% of the global GDP in the late 2010s down to around 50% by 2030. Just as important, the share of intra-regional flows

has increased significantly; and by 2030 it accounts for almost two-thirds of global trade – compared to just one half pre-2020.

Investment flows have shifted even more drastically as major constraints to global operations, financial control of corporations, and externalization of profits from one bloc to the other have been put in place. Travel has been similarly affected, barely recovering to pre-2020 levels and showing markedly new geographical patterns. Into the 2030s, the world is on a weak growth path and the stage seems to be set for a long period of global secular stagnation.

As many countries have been hit hard by a jump in interest rates, other forces of disruption have been at play. The heterogeneity of the increasingly fragmented financial regulatory landscape spurs the development of disruptive unregulated innovations. Financial hubs have become disaggregated, international regulatory cooperation has been lacking and a “regulatory race to the bottom” has created a fertile ground for recklessness in financial transactions. In this context, major shares of financial services are being provided by under-regulated firms that were originally not financial institutions, and cryptocurrencies have proliferated and spread.

Drifting is a world of bipolarity, sharply split into two main blocs, where countries need to align with one of the superpowers and only a few countries find a way to remain non-aligned. Supply chains have moved from “just-in-time” to “just-in-case”, with states trying to keep their production as close at home as possible. Although wars have remained confined to sub-regional conflicts other forms of confrontation have become common: cross-bloc hurdles, sanctions, and attempts to destabilize rivals, including through cyberattacks and sabotage. Here, technology has emerged as a powerful tool for foreign interference, and the development of military artificial intelligence has drawn both superpowers into an AI arms race. In this context, the development of bloc-affiliated supply chains of critical materials such as rare earths, or the revival of domestic industries for essential components of digital technologies, such as semiconductors, has become extremely important.

The segmentation of the world into two economic and political blocs has had major implications for international organizations. Most of the global ones that emerged from the 1940s are either inoperative, merely ceremonial (as in the case of the UN), or have been captured by one of the blocs, and new bloc-affiliated institutions have taken their place reflecting the new set of rational choices. However, these new institutions remain ineffective, as there is a generalized preference for more informal and ad hoc platforms for cooperation. International agreements have become very elusive – no matter their potential value. The G20 stopped meeting after 2025 – and there is no credible platform for international concerted action or even dialogue.

Global IOs have been gradually replaced by regional organizations, so that, for instance, the Association of Southeast Asian Nations (ASEAN) and the African Union (AU) have become more relevant than in the past. Both superpowers minister to these organizations in an attempt to sway entire regions, and not merely one or two countries. In parallel, informal cooperation also continues bilaterally and within regions, for example in South Asia: beyond classic institutional parameters and behind closed doors, the region’s leaders convene to informally coordinate in an ad hoc fashion on issues of mutual interest (Sahasrabuddhe, 2008), including China’s increasingly assertive role.



The European Union found in this world's sharp bipolarity an unexpected impetus for consolidation, even as paradoxically there is a deepening of divisions within the bloc. At the beginning of the 2020s, both Hungary and Poland were on the verge of expulsion from the Union. But by 2030, with a pragmatic acceptance of a "multiple speeds" approach, both countries have shown more willingness to uphold the key principles of the EU. However, there are risks of a freezing of the cleavages separating those countries more interested in pushing for a Federal Europe, and those willing to go back to a mere Single Market. Further, the appearance of new strains of the virus and the prolongation of the pandemic, with low-income countries suffering the most, have caused rifts within the Union. As the economic situation worsened, inward-looking tendencies increased, and a generalized lack of solidarity prevailed. In this context, recovery has been most uneven and the North-South divide between EU countries has been magnified. There is another ghost that haunts the international system: nationalism. What had manifested itself during the pandemic as "vaccine nationalism" (restricting exports of shots to other countries, and hence contributing to a delayed end of the pandemic), has proven to be a deep undercurrent affecting many sectors and expanding the rationale for strategic interventions. Countries around the world have become more protectionist and show it not only on a wide range of measures disrupting global supply chains, but also on restriction of foreign direct investment (FDI), foreign asset ownership controls, and the defence and support of national champions. Even in places such as the EU, always proud of its single market, there have been intense debates regarding the possibility of intra-bloc tariffs and more protection of both national and European products.

Paired with an expansion of powers of central governments, this has led to restrictions of fundamental rights, even in democratic countries. Immunity passports after the virus and surveillance systems in an era of more conflict and more censorship in social networks have become the norm. However, this has not led to greater social unrest. Reduced perceptions of inequality, the assurance of safety that came with state controls, an unstable international environment, and policies of "rally around the flag" deployed by nationalistic governments have contributed to easing tensions. Tensions have increased, though, around immigrants, with weak economic growth reinforcing nationalist and even greater nativist attitudes. Thus, minorities face an increasingly unsafe environment, and whilst overall domestic inequality has been reduced, it has increased between certain segments of the population, with migrants and minorities being further marginalized. Many of the migrants come from countries in a dire situation, given the effects of climate change and the lack of proper measures.

There have been other outlets for social assertiveness. Notably, Big Tech companies. After Big Tech flourished at the beginning of the century, states used their newfound powers to control these activities as part of the competition among superpowers and their spheres of influence. Because of the sharp geopolitical segmentation of the world, this does not happen through concerted global action but through unilateral interventions by many countries forcing break-ups, spin-offs, divestitures, and limitations on the scope of activity (for instance financial services) of the large digital corporations. In this context, China has been able to advance its vision of 'cyber sovereignty', with stricter controls for the flow of information and in line with aspirations of technological autarky (Budnitsky & Jia, 2018). The result has been a bifurcation of digital platforms, and the internet is no longer a World Wide Web (WWW), but two major silos with dedicated corporate players in each of them that are not allowed to play in the other.





Finally, there is little appetite for investment on the “green transition”. Businesses that in the early 2020s were spouting green commitments quickly forgot about them as weak growth took away the sense of urgency and citizens’ attitudes and behaviours supportive of eco-friendly choices also lapsed in this frugal world. Despite global acknowledgement of the existence of a problem, the steps are remedial and taken mainly at local level in the places more affected by the effects of climate change, while those that do not experience it first-hand are reluctant to commit resources to green causes.

### ***Voices from the Drifting world of 2030***

*We did not expect that the commercial cold war would go so far so fast. Everybody has tried to maintain good economic relations with both China and the US, but I’m afraid that is no longer a possibility. In Japan we are caught between geography and political affinity and it has proven to be a hard knife’s edge to manage.*

Nakatomi Tadao, Japanese Minister of Economy, Trade, and Industry

*Well, the EU has always been a project in motion—and we are still happy to be close but outside. It muddled through the crises of the 2010s and the 2020s, and seems to be holding together today thanks to pragmatic concessions and lowered expectations—including the “two speed” approach. It simply cannot enforce an even closer Union over the will of citizens and with different national attitudes to Russia and China.*

Birgitte Knutsson, Norwegian analyst of EU affairs

*We exported to many countries before. But now the world is a very different place and to avoid having to choose sides you need to rely on partners in different markets. Withdrawals from agreements, signing new treaties exclusively with neighbors and allies plus all the hurdles protecting local producers complicate everything and add to costs. I wish we had a government more skilled in dancing this tango with multiple economic partners that would give us a competitive advantage.*

Elena Gómez Falchiatti, Argentinian winery owner

### **5.1.1 Regressive Global Governance**

This world divided into two spheres of influence, with bloc-affiliated institutions in each, is characterized by strong geopolitical competition and tense intergovernmental relations. Universal or transcontinental formal intergovernmental organizations have either ceased to exist or have reoriented their activities towards one of the geopolitical blocs. This has been the case with Bretton Woods institutions, namely the IMF and the World Bank, which now operate in the US sphere, whilst new institutions, such as the AMF, have appeared in the Chinese sphere (Henning, 2006). Global informal intergovernmental organizations, such as the G20, have also ceased to meet, and have been replaced by smaller ad hoc groupings.



The process of global governance is largely state-centred, and countries are highly concerned with the assertion of their national sovereignty (Sahasrabuddhe, 2008). Therefore, there is a preference for non-institutionalized, ad hoc, minilateral or bilateral cooperation on specific issues, and non-state actors and sub-state authorities do not take prominent roles. However, regional organizations, in response to the absence of effective global governance institutions and to protect their regions from the imperial-like interference of the US and China, have also increased their relevance in several areas, including in security, trade, and development (Wang, 2020).

In general, global governance in this world is regressive, fragmented, minilateral, and highly informal. Because intergovernmental relations are tense, there is little cooperation in most areas. There have been barely any new formal international agreements, and in general multilateral approaches to solving global issues are avoided. This has resulted in increasingly divergent financial regimes, the rise of protectionism and economic nationalism, the breakdown of climate governance, and paralysis at the UNSC.

### **5.1.1.1 Climate**

In an environment characterized by tense intergovernmental relations and intense geopolitical competition, international cooperation to mitigate climate change has been notably absent. The UNFCCC and the Paris Agreement, the cornerstones of climate governance, have become largely irrelevant, and their authority and legitimacy has quickly waned. By the mid-2020s there is little compliance with the agreement on the part of most countries, and some have even begun to pull out of it altogether. International NGOs decry the lack of compliance with existing nationally determined contributions (NDCs) and the failure of the agreement's 'ratchet mechanism', but this falls on deaf ears, as both governments and populations are preoccupied with economic issues. By 2030, many countries do not submit new NDCs, and ambitions overall decrease significantly. At this point, countries under the Chinese sphere of influence have for the most part exited the agreement, and whilst some countries in the US sphere remain, the US itself is also absent. This massive loss of support has caused serious resource constraints for the UNFCCC, and an even larger climate finance crunch more broadly. Much the same can be said of the International Panel on Climate Change (IPCC), which has lost support from the US and other fossil fuel (FF) producers due to its inability to produce scientifically accurate but politically acceptable results.

There are some efforts to tackle climate change at the regional level, but these remain mostly superficial. The lack of action on the part of the Global North has sparked tensions with Southern regions, which are amongst the most affected by the adverse effects of climate change. The African Union, for instance, has been preoccupied with dealing with food security issues and water availability, and as adaptation costs continue to rise dramatically, it finds itself in ever more need of urgent financing. Developed countries, however, are unwilling to provide financing, and the \$100 billion per year target has not even come close to being met.

The Ministerial on Climate Action, previously co-hosted by China, the EU and Canada, stopped meeting after relations between China and the US soured beyond repair and the world fell into two separate blocs. This has extinguished all hopes of further talks on the implementation of the Paris Agreement among some of the major emitters. NGOs, activist





groups, and grassroots movements have voiced their concerns, but they lack the authority or coercive power to spark meaningful change. Further, as citizens become more preoccupied with economic and geopolitical issues, and as relations between countries become more difficult, climate movements lose their broad, transnational bases and become narrower and more localized. The exception lies with transborder epistemic communities of engaged scientists who periodically launch cries for climate action despite the irrelevance of the IPCC and non-action by governments. The private sector, as well, has been unable to advance the energy transition. As governments lost interest, support for public-private partnerships (PPPs) rapidly disappeared and the number of initiatives exponentially decreased. A race to the bottom in sustainability standards quickly ensued, and only some sector-specific initiatives for adaptation remain.

#### **5.1.1.2 Finance**

Global financial governance (GFG) has changed from a fragmented, networked architecture centred around the G20 and the Financial Stability Board (FSB) (Zhang, 2020) into two separate, informal, and minilateral regimes for each sphere. On the one hand, the US-dollar-centred sphere, which has retained many of the Bretton Woods institutions. On the other, the Renminbi-centred (RMB-centred) Chinese sphere, in which a combination of new and reformed institutions has come to the fore. These regimes evolve separately and are increasingly divergent, although strong functional differentiation persists in both. That is, the monetary regime, banking, securities, insurance, and accounting and auditing standards are all governed in silos, with no linkages or coordination between them.

The Bank for International Settlements (BIS) and the Financial Stability Board (FSB) have retained their influence as coordinators in the US sphere, along with the International Monetary Fund, which has reoriented its activities to focus on US client states. China has disengaged from both institutions, but it has managed to play a more assertive role in global financial governance through regional institutions (Zhang, 2020). For instance, the Contingent Reserve Arrangement (CRA) has been expanded and transformed into the Asian Monetary Fund (AMF), the main financial intergovernmental organization in the Chinese sphere and a competitor to the IMF. The Chiang Mai Initiative Multilateralization (CMIM), the multilateral currency swap arrangement launched by ASEAN+3, has also been completely delinked from the IMF (Grimes & Kring, 2020; Henning, 2006) and is now linked to the Chinese-led AMF (Henning, 2006). The G20, previously at the core of global financial governance (Zhang, 2020), has ceased to meet.

Private actors and civil society play little role in this context. However, the increasingly fragmented and heterogeneous financial regulatory space has spurred dangerous financial innovation, and as a result cryptocurrencies and non-traditional financial actors have acquired greater relevance in some parts of the world, within the US sphere.

#### **5.1.1.3 Trade and Development**

As the world took a protectionist turn in the 2020s, the WTO progressively lost authority and legitimacy. The conflict over the appellate body has proven insolvable in the current geopolitical landscape and attempts at reforming the institution failed at the beginning of the decade. Trade governance has become fragmented, with separate bloc-affiliated institutions



arising and a generalized preference for less institutionalized bilateral or regional agreements. In the US sphere, the Global Trade Organization was created to stimulate intra-bloc trade, though its success has been very limited. The same can be said of the Pacific Trade Cooperation Organization, which has taken this role in the Chinese sphere. Both institutions have proven servile to the will of the two superpowers, and defend policies which instead of promoting free trade, compartmentalise it. In this world, trade wars have become common, and trade policy has been instrumentalized to serve as a foreign policy tool. Supply chains are segmented along geopolitical lines, and they are more compressed and vertically integrated.

International cooperation on development has also been disrupted by the sharp geopolitical division between the two spheres. The World Bank has reoriented its activities towards US client states and has retained much of its influence in this sphere, although it faces severe budget constraints. The Asian Infrastructure Investment Bank (AIIB) has merged with the New Development Bank (NDB), and it has become a truly global institution, though it has restricted its activities to China's client states, and it remains focused on infrastructure development. In this context, aid has again become part of patron-client relationships within the blocs, and purely philanthropic relief and development is funded mainly by private donors, NGOs, and foundations. Further, the trend towards increasing cross-cutting issue convergence observed in the previous decades has been reversed, and there is little connectivity between trade and development issues. Thus, gender, labour rights or sustainability concerns are seldom incorporated into trade deals.

Contrary to the difficulties faced by global intergovernmental institutions, regional organizations have found renewed importance in this world. As the share of extra-regional trade dramatically decreased, regional organizations stepped in to promote intra-regional trade, albeit with little appetite to get involved in dispute resolution. Thus, ASEAN, the African Union and the Southern Common Market (MERCOSUR) have taken a more prominent role in this world. Trade between regions, however, remains stunted, and there is no movement on convergence across regional trade agreements (RTAs).

Transnational multinational enterprises (MNEs) have also been greatly affected by the protectionist turn and face many barriers when operating across borders. Economic nationalism has been on the rise, and many governments have begun to support the emergence of national champions, particularly in strategic sectors of the economy.

#### **5.1.1.4 Security**

The United Nations Security Council (UNSC) finds itself in handcuffs in this world. Despite rising antagonism between the US and China, neither superpower has found it in its interest to exit the UNSC. The organization has become much more restrictively used and narrowly focused, and tensions between its authority and legitimacy are surfacing. The UNSC retains its authority from the perspective of the P5 members, but its legitimacy is eroding in the eyes of emerging powers such as Japan, Germany, or India. To play off these tensions, and to compensate for paralysis at the UNSC, informal configurations are often sought, and these can take many forms depending on the issue area. The International Atomic Energy Agency (IAEA) and the Non-Proliferation Treaty (NPT) remain in place, partly because the Security

Council members have retained their influence, but there have been no further reductions in stockpiles.

Interpol, on the other hand, has been gravely affected by a climate of pervasive distrust in intergovernmental relations. As the willingness to share information steadily decreased, the organization eventually broke down and was replaced by regional organizations. The Organization for Security Cooperation in Europe (OSCE) has suffered a similar fate. Attention to its mission diminished as states became more preoccupied with other issues, and the political schism already existing between the organization only widened. As a result, it lies completely frozen and forgotten.

Regional organizations, however, have been strengthened. The Shanghai Cooperation Organization (SCO) has gained more prominence, although it has lost India as a member. The organization focuses on maintaining stability in China's neighbourhood (Pradhan & Mohanty, 2021), and this has prompted its involvement in Afghanistan. The African Union has also taken a greater role in security, and it is actively engaged in conflict prevention, mediation, and resolution, especially due to the inaction of the UNSC and the diminished role of the EU in the region. China has provided some funding assistance for some of the organization's programs, particularly in the countries it is most interested in.

Whilst the North Atlantic Treaty Organization (NATO) continues to exist and it still plays a role in safeguarding European security, it has shifted its focus towards Chinese influence in the Pacific space. The US is still invested in European security, but the economic situation has reduced options for security cooperation and the focus on China has made it necessary to divest resources elsewhere. The EU has not taken over its functions nor has it made much progress in the Common Security and Defence Policy (CSDP), also constrained by the dire economic situation.

Although private non-state actors do not play an outsized role in this world, private security actors involved in migration management have acquired greater powers and influence. As migration flows have dramatically increased, nations have responded by enhancing the security of their borders. The securitization of migration has led to an increased involvement of private actors in, for instance, border control, surveillance, and biometric data gathering and processing.

Overall, nation states have avoided relying on intergovernmental institutions and instead there exists a generalized preference for carrying the global governance of security through ad hoc groups of countries or merely bilaterally. Non-institutionalized regional cooperation has also become important. In this context, the Quadrilateral Security Dialogue has gained relevance, with the US, Japan, Australia, and India holding semi-regular summits.



## 5.2 Shifting

*In this world, many widely held assumptions about the future have been shaken as the world's bipolar superpower structure never took hold, shifting alliances became the norm, and manufacturing technology reshaped labour markets, supply chains and productivity dynamics. Government interactions with businesses and with assertive, restless citizens have also been reshaped by the expansion and perils of digitalization. It is an environment where the normal state of affairs is one of high uncertainty – including because of unstable regulatory waves and international alliances.*

Intergovernmental relationships are fraught, and pervasive distrust makes it difficult to make progress on global standards and hinders the work of most international organizations. The US remained unengaged in most international cooperation efforts, as partisanship and political polarization continue to be the norm and no party has managed to control the White House and both chambers of Congress simultaneously. Without effective global enforcement institutions, it has become even more difficult to hold aggressors accountable. While the path to 2030 has not included new sweeping rounds of protectionist measures, major countries have often 'weaponized' trade policy and used this threat in adversarial negotiations.

After a period of considerable uncertainty about international economic relations – which takes its toll on investment and economic growth – new agreements are taking place and a patchwork of alliances is crafted amongst states with specific affinities, be they cultural, religious, or geographical. In this context of distrust for institutionalized multilateral cooperation, bilateral and minilateral informal and ad hoc platforms for cooperation take centre stage. Regional powers, as well, have acquired greater relevance as protectors of their region's autonomy (Wang, 2020). The EU had a rough time post-Brexit and, especially, with fundamental differences growing between the old core and some of the newer members throughout the 2020s, but as of 2030, though weakened, it has managed to stay mostly together.

The world gave a sigh of collective relief when it became clear that we were not going into a feared New Cold War. However, despite the rediscovered cooperation of China and the US in certain areas, relationships between many countries soured very soon. China's economy experienced a hard landing – stumbling soon after what had appeared in 2021 to be a solid post-COVID recovery. A collapse of large segments of its financial system, dragging down with it many countries involved in its supply chains, triggered the financial crisis of 2023. Recovery from COVID-19 has been delayed beyond expectations in many countries. The divide between high-income countries and low-income ones has consequently deepened (Bernes, 2020; Sokol & Pataccini, 2020), with multiple countries, for example in Latin America, heavily battered by economic woes, COVID-related health crises, and the effects of climate change. Mired in their own lagging recoveries, the high-income countries do not respond to the dire situation in the other half of the world.

This new financial crisis in 2023, in the wake of a debt-ridden, sluggish economic recovery from a long-drawn out COVID-19 pandemic and in combination with conflicts over vaccines and responsibilities for the virus, poisoned international relations. The inability of the main IOs to manage these conflicts resulted in their persistent loss of legitimacy, and platforms for



bilateral dialogue have emerged to replace them. Rogue states have profited from this and, with even less effective institutional capability for global enforcement than was the case in the early 2020s, it is difficult to hold aggressors accountable, and countries resort to retributive foreign policy.

Financial regulation is one of the few exceptions. There has been a recognition, after the financial crisis in 2008 and several major cases of cross-border financial fraud, that contagions were not easily stopped, and there is new appreciation of the benefits of reliable, stable financial systems. While this was hard to achieve through inter-governmental politics, it has proven possible when cooperation was positioned at a more technocratic level, with national regulators finding common ground and working together quietly but steadily. In this less fragmented regulatory context, incumbent financial institutions retain major shares of services (including through fintech acquisitions and regulatory protection); and cryptocurrencies remain a fanciful notion with limited niche reality.

Smart manufacturing technologies are an important source of brightness in this world. They have spread widely and play a transformative role, encouraging investment and making their sectors more efficient and productive. They are also imitated by other sectors across states, providing a huge competitive advantage to those who have led the adoption of smart manufacturing. At the same time, as adoption of robotics and machine learning spreads, a kind of Moore's Law is unleashed, resulting in rapidly dropping costs of reliable robots and giving SMEs the opportunity to play on a more levelled field. Similarly, countries that focused early on creating the conditions for smart manufacturing to thrive reap rewards – especially if they have managed the transition by fostering the deployment of technologies that work as “co-operators” and not mere replacement for humans – which has proven easier to intend than to achieve.

However, smart manufacturing developments have not been accompanied by consistent support for digital transformation, furthering digital gaps amongst countries, businesses, and generations (Schilirò, 2020). This has led to an uneven spread in the proceeds from productivity gains, which has increased the gap in the shares of value added going to labour and capital – to the benefit of the latter. Similarly, the widening digital gap between countries has proven an obstacle to progress on bridging the high-/low-income divide, with many least developed countries at risk of falling further behind. The lack of international cooperation to support consistent digital transformation has hindered knowledge sharing and technology transfers between countries, and the patent system has emerged as a great source of dissatisfaction.

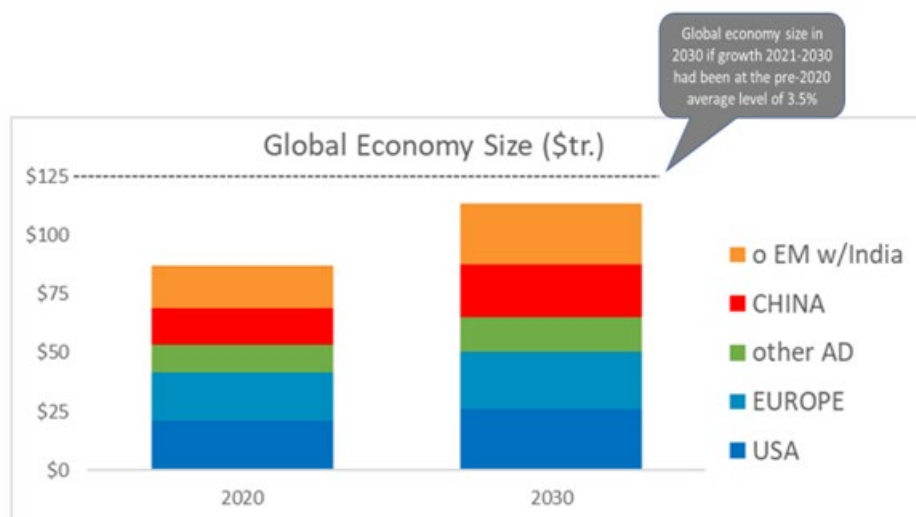
The global economy in 2030 is about \$12 trillion smaller than it would have been if growth rates in 2021-2030 had matched the pre-2020 average of 3.5% p.a. (the level indicated in the chart by the dashed line). Progress in convergence (reduction of income gaps across countries) has slowed down to a crawl and the size of China's GDP is still significantly below that of Europe – which, in turn, lags the US GDP size.

It has been only thanks to progress on the adoption of ‘smart’ manufacturing technologies that there has been steady productivity improvement and, thanks to that, at the start of the 2030s the world seems set for a slightly improved economic performance – in line with the pre-2020 growth rates. In the meantime, per capita incomes have only increased by 13% since 2020



(compared to 16% in the 2010s) and inequality has not been reduced in almost any country. In countries where adequate social protection systems, redistribution policies and re-skilling initiatives to support workers that have been replaced by automation have been lacking, growth has been uneven, inequality increased and polarization between high- and low-skilled workers has increased within societies.

Figure 9 Size and composition of the global economy in the Shifting World Scenario



Weak economic growth has forced a short-term focus and hindered consideration of any policy or investment with short-term costs (in terms of either political or financial capital) that would only produce results with a significant lag and require adopting a long-term perspective. This has notably affected green initiatives with decarbonization, and other related projects, placed on the back burner until the late 2020s.

Trade flows grow barely in line with GDP across the world as an emphasis on resilience and an environment of regulatory uncertainty result in slow compression of supply chains. In addition, the share of intra-regional trade in global flows increased significantly through 2027 and continued to increase more slowly after that. The net effect was for the ratio of extra-regional trade flows over global GDP to decline significantly – down to 25% (from a 2019 level of 30%). Further, trade agreements have not gone beyond the traditional confines, and concerns over consumer rights, labour rights or sustainability standards have been placed in the backburner.

Although protectionist pressures have not increased significantly, regionalization and other compartmentalization of trade have made global supply chains more complicated. Cross-border investment has grown even more slowly than global GDP and trade as much of the funding to install smart manufacturing technologies is concentrated in a re-shoring effort – and when it happens it also gravitates to regional spheres.

Trust in government has been weakened in many countries by mishandling of emergency powers during the pandemic period (with many corruption instances revealed later) and power struggles between different government levels have left a bad taste about governance. The



experience of the pandemic – with greater disarray in countries where significant decentralization had taken place – has led to a rethinking, and new centripetal forces are at play producing the recentralization of an increasing number of functions and resources. This apparent paradox, combining recentralization of powers, but also a retrenchment of state capabilities, has harmed welfare states. Both in developed and developing countries, the state has become more of a watchdog, focusing on providing security and protection, instead of trying to take care of citizens “from cradle to grave”. This, alongside further increases in income inequality within countries, fuelled a climate of social conflict that has forced to devote more money in policing and security.

The economic downturn caused by the financial crisis of 2008 and memories of mishandling of the pandemic crisis helped to boost the prospect of strongmen in both autocratic and democratic governments. Democratic backsliding is no longer a rarity: indexes of democracy have downgraded many countries, and even the EU struggles to enforce its standards of rule of law and democratic practices within its borders. Not only the Visegrad Group, but some other countries have shown worrying signs of disaffection with a democratic system. Affective polarization is still on the rise amongst the remaining democracies, and leaders of autocratic countries hold a tighter grip than before. This has had a serious impact on the rights of women, lesbian, gay bisexual, transexual, queer (LGBTQ+) communities, and minorities, with patriarchal, homophobic, and nativist attitudes on the rise. As a result, in many countries gender-based violence has been exacerbated.

The financial crisis and its ripple effects have also helped in, on the one hand, concentrating more power in the hands of states. The performance of regional governments in decentralized countries in response to the crisis raised serious questions on the usefulness of decentralization, and citizen disappointment created fertile ground for a recentralization of power. Paradoxically, this came accompanied by demands for more streamlined and efficient states. As a result, government budgets at all levels are under pressure and in many cases social programs, rather than security and defence, are bearing the brunt of the budget retrenchment.

Old tensions, such as in the Middle East, have not abated and flare-ups are not uncommon. Fortunately for the world, China and the US remain in a stalemate, acknowledging the danger that a conflict between them would pose, but they are not eager to play the role of global policemen and look instead for pragmatic, arm’s length solutions – including by “lending” weapons of high-tech war such as drones and robots.

The increased frequency of cyberattacks (criminal, political interference, misinformation, vandalism, etc.) has led people to shun away from digital technologies, limiting their use to activities that provide benefits with limited exposure. Examples of the online activities stunted by this fear include financial services and complex IoT platforms involving consumers in repeat purchase relationships. 5G proved slow and disappointing in its impact and people (and then followed by businesses) have also shied away from all-encompassing social media (it became clear in retrospect that Facebook, for example had already reached its peak by 2020) and opted for more compartmentalized platforms. As for governments, the gap between digitally sophisticated ones and the rest grows deeper with every passing year, and with it, the economic and belligerent potential of each nation.



The combination of all these factors has led to angry citizens everywhere. Demonstrators of very different strands clash in the streets of cities around the world. Those who wish to topple autocracies converge with those claiming for better social services and improved opportunities. But protestors in favour of peace and greater international solidarity clash with demonstrators defending the “patriotic” actions of their governments. Neither democracies nor other types of political systems have managed to appease protesters – much less handle their demands through any formal, democratic channels. Fire-ridden streets, detentions, and more use of violence by both sides has become the norm, with very few countries escaping this cascade of radicalization.

### ***Voices from the Shifting world of 2030***

*My job has never been harder. The UN’s clout is not what it was, and we get little useful guidance from NY. It is very difficult to advice our member countries in North Africa and the Levant on strategies for international cooperation and positioning. Global alliances are so fluid and issue-specific that the wisdom from experience is of little help and often does not apply.*

Ruba El Masry – Executive Secretary of UNESCWA

*The older generations (which include the leaders of most traditional parties) could not understand or anticipate the ease with which millennials and digital natives would find ways of supporting social protest movements across countries—with insurgent know-how as well as resources. And this is just the start of a movement that will not stop at protests but also become a springboard for far-sighted activism across issues.*

Greta Socialt -- Swedish founder of a global activist social platform

*Financial regulators had counted on the G20 to provide guidance and support for prudential norms that would be widely accepted. As the G20 became inoperative and political international cooperation became unreliable, our response to the global financial crisis that originated in China could only come from a technocratic alliance. Fortunately, the crisis led to recognition that financial stability benefits all and we have been amazed at the quiet but steady support for standard-setting and preventive alerts that we have received.*

Ben Zhuang – Singaporean head of the association of financial regulators



## 5.2.1 Disjointed Global Governance

This is a highly unstable world, where conflict abounds and shifting alliances are the norm. There is a generalized distrust of multilateral approaches to global governance, and little international cooperation in most areas. An exception lies with financial governance. After China's 2023 financial crisis, impetus was found for global financial reform. Cooperation in this regard, however, remained mostly technocratic and no sweeping reforms were introduced.

Global governance is largely state-centred in this scenario, and there is high concern with the assertion of national sovereignty (Sahasrabudde, 2008). Bilateral or minilateral non-institutionalized cooperation is generally preferred, and in some areas, such as trade, regionalization processes have also been underway. Sharp North-South divisions persist in this world, and disputes over climate change have exacerbated these differences. Democratic backsliding has become the norm, and failed states abound. In this context, private security actors and non-state actors (NSAs) in conflict zones, such as warlords, have acquired greater relevance. Social unrest is also widespread, as repression and surveillance preclude institutionalized social participation.

### 5.2.1.1 Climate

With economic and security concerns taking centre stage, the sense of urgency regarding the climate crisis seems to have waned, and progress in this area is mostly rhetorical (by 2030, little actual global progress can be seen in curbing emissions). The UNFCCC has managed to muddle along, but without much real traction in terms of compliance and implementation of the Paris Agreement. The loss of leadership from key states, such as China due to its recent financial crisis, has slowed down progress in negotiations. The ambition of NDCs has not significantly increased, and the UNFCCC's loss of authority and serious resource constraints have rendered it powerless. Further, many low-income countries have begun to question the balance struck with regard to the Common But Differentiated Responsibilities (CBDR) principle and demand more ambition and resources from the Global North. This has contributed towards a greater high-/low-income countries divide and has spilled over to other areas of global governance.

Climate action at the regional level has also been weak, with regional organizations more focused on other areas, such as security. Notably, the EU has seen its ambitions of becoming a climate leader curbed by the rise of authoritarian, climate change sceptic governments in some Member States. Instead, most climate action takes place through coalitions of willing states on particular energy technologies and mitigation or adaptation solutions.

Climate justice issues are notably absent from discussions. Slow progress, land grabs in low-income countries, and pipeline projects through Indigenous territories have sparked fierce resistance from coalitions of Indigenous peoples in the Latin America, Canada, New Zealand, the US, and Australia. However, they remain excluded from climate talks and thus resort to more radical actions. Similarly, less institutionalized, and more radical movements such as Extinction Rebellion have spread all over the world as a response to the perceived lack of action. On the more radical end, some groups have even been involved in cyber-attacks on high-emitting industries.



Overall, global climate governance has become less hybrid, with non-state actors, sub-state and authorities seeing their authority diminish. What little action exists is focused on mitigation and adaptation, but initiatives face severe budgetary constraints as appetite for green financing has been reduced in the current economic context.

### **5.2.1.2 Finance**

Despite difficult intergovernmental relations and a generalized distrust of multilateral approaches in this world, after China's financial crisis impetus for financial reforms has been found at the global level. However, cooperation on financial regulation is merely technocratic, and the architectural core of global financial governance remains intact.

The Bank for International Settlements (BIS) retains its position as the main institution for banking regulation, information sharing, lending to central banks... It also remains highly exclusive, with the US and the EU maintaining their influence over the bank. China remains engaged in this organization, despite not playing a key role within it (Zhang, 2020). After the financial crisis in 2008, the Basel Committee on Banking Supervision (BCBS), headquartered at the BIS, pushed for the implementation of Basel IV, which limits the use of internal risk models and advances standardized models for risk calculations.

Similarly, the IMF has retained its influence and role safeguarding monetary and fiscal stability. However, in the absence of institutional reforms to reflect the changing geopolitical landscape and to appease the concerns of Southern countries, it faces legitimacy issues, particularly from emerging economies. Given the economic situation, and the reluctance of governments to participate in multilateral fora, there have also been debates about country contributions that have imposed resource constraints on the IMF.

Informal institutions have remained the main game in financial governance, and this looks unlikely to change any time soon. The G20 remains at the core of global financial governance (Zhang, 2020), albeit in a weakened position, facing legitimacy issues due to accusations of exclusiveness. The FSB, the main informal intergovernmental organization for coordination on financial issues (Zhang, 2020), has strengthened its role as a coordinator and has increased linkages between different issue areas and regions, though these remain limited. Further, in the absence of institutional reforms, it faces similar legitimacy issues as the IMF, the BIS or the G20.

Overall, global financial governance remains highly informal and minilateral, but it is less fragmented. Separate regional orders continue to evolve, but coordination between regions has improved. Functional differentiation has also been reduced by introducing greater linkages between issue areas. This has been done mostly by strengthening the role of the FSB, rather than the creation of formal institutions.

### **5.2.1.3 Trade and development**

The WTO has resisted reforms, and the conflict over the Appellate body remains unresolved. Thus, the organization lacks any dispute resolution mechanism to settle issues between members. Whilst there have been no sweeping rounds of protectionism, multilateral approaches to trade governance are avoided in this world. This has meant that the WTO is



paralysed, focused on a very narrow scope of activities. Instead, a preference for bilateral agreements can be observed. The Regional Comprehensive Economic Partnership (RCEP) or the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), for instance, were scrapped and replaced by a patchwork of bilateral agreements. Supply chains have had to be rethought as ad hoc bilateral or small-group agreements come and go and there is considerable uncertainty beyond the short-term on what rules apply to many international transactions.

Although intra-regional trade flows are increasing, regional organizations such as ASEAN or the EU have not been able to gain leverage in international relations, nor have they been able to advance much in terms of further institutionalization. ASEAN has remained an intergovernmental talk-shop, with no incentive to develop a single market. In the EU, the Single Market, cornerstone of European unification, has suffered several setbacks after the rise of some protectionist policies, and big discrepancies regarding the meaning of strategic autonomy in economic matters. Some countries and organizations have started creating economic champions, and trade policies have become progressively disconnected.

The World Bank retains its position as the main global development bank, especially after the Chinese financial crisis forced the AIIB to take a step back and imposed severe budget restrictions on it. However, the World Bank has also seen its financing and support decrease, and fewer competences are being granted to both. Disputes over institutional reforms and the rising discontent of emerging powers vying for more influence within the World Bank have diminished its authority and legitimacy. Further, although the NDB and the AIIB are less active, the development environment is highly competitive, and the World Bank has lost ground to regional development banks (RDBs) that are nimbler and more in tune with the needs of their regions.

In this world, trade is stagnating. Multilateral approaches to trade governance are avoided, the WTO is inoperative, and it has been replaced by bilateral agreements. Intra-regional flows have increased, supply chains are being slowly compressed, and there are even some re-shoring efforts. Trade has been regionalized but there is no convergence across RTAs. With respect to development, the old Bretton Woods institutions have remained in place, but they face increasing legitimacy issues and budgetary pressures, and are challenged by US disengagement and increasing competition from regional development banks.

#### **5.2.1.4 Security**

Formal intergovernmental institutions are ineffective in this world. The United Nations Security Council (UNSC) has not been reformed and it remains deadlocked. Even though there are no clear blocs, China and the US constantly veto or threaten to veto UNSC resolutions. This has meant that the UNSC is paralysed, inactive. The UN in general is underfunded and weakened, as in this world there is little appetite for multilateral cooperation. The IAEA and the NPT have remained central in non-proliferation efforts, but some countries are threatening to exit the agreement. Non-state actors and rogue states have also emerged as important threats to the NPT. NATO still exists, albeit mostly in name, as it has been weakened by US disengagement. After losing Turkey as a member, it has fallen into near irrelevance.



Instead, the process of global security governance is carried out in informal configurations. For instance, ad hoc, minilateral groupings of countries. These groupings tend to be issue based, with a very specific interest and mandate. They also tend to form around likeminded countries, be it due to similar interests, priorities, or threat definitions. They are also more flexible than traditional alliances and are better suited for a constantly changing world. Regional minilateral groupings are also common, with G3s and G5s re-assembled through regional lines. Further, as new threats such as warlords in conflict areas or rogue states have acquired greater prominence, new informal intergovernmental organizations have also been developed to address NSA and rogue state control of drones and semi-autonomous weapons.

Cyberattacks, NSAs such as warlords, social unrest, rogue states, and the rise of authoritarian far-right governments have emerged as the main challenges of this world. Widespread repression and surveillance preclude institutionalized civil society participation, and social unrest spreads and is met with fierce repression from authoritarian governments. The number of failed states has also increased, and NSAs have gained greater power. In this context, private security actors acquire greater relevance. Private military security companies (PMSCs) take advantage of the chaos and seize control of critical energy sources, such as oil fields in the Middle East & North Africa (MENA) region. Further, as unrest and violent protests spread, especially in failed states, governments increasingly rely on private security providers.

In general, ad hoc minilateral cooperation is preferred in this world, where multilateral approaches are distrusted, and alliances are constantly shifting. It remains very state-centred, with countries more preoccupied with the assertion of their national sovereignty (Sahasrabuddhe, 2008). Global security governance is progressively more fragmented and lacking cohesion, and a number of threats have proliferated. New actors, such as private security contractors, have acquired a prominent role. Social unrest is also widespread in this world, breeding instability.



## 5.3 Rising

*The rising tide of prosperity in this world that remains loosely bipolar arose in good measure from widespread recognition of the benefits of collaboration, open markets and even competition. This was not an epiphany but happened only after costly experiments with restrictive and defensive policies. In the process, large corporations and mega cities have increased their clout and provided a solid basis for rapid technological adoption, productivity improvements and the economic growth that has created the fiscal space for determined climate action. The price for all this has been the continued increase in income inequality in many countries and a greater divide between urban and rural areas – both factors fuelling unhappiness.*

The global economy has grown during the 2021-2030 period at a rate faster than that of the pre-pandemic period. A solid rebound from the pandemic effects in most countries by mid-2022, and a determined effort by the Biden administration to restore international cooperation, that was well received by China, resulted in a betterment of intergovernmental relations, a quick re-globalization dynamic and generalized improvements in business and consumer confidence. Many countries saw their economies thrive, and manufacturing tech and other forms of innovation produced a strong, sustained boost to productivity – so that into 2030, economic growth looks set to remain strong. The digital economy has developed quickly, with adoption accelerated in response to the demands of the pandemic. As a result, a process of digital globalization is underway, with accelerating and increasing flows of data and information, and a focus on digital services and intangible assets.

There were never bombs on the South China Sea, or armies clashing in the Baltic countries. The world of 2030 has not seen neither a confrontation amongst the great powers nor the feared Cold War between China and the US. On the contrary, the relationships between the two main superpowers are better than ten years ago, and cooperation has been reached across several areas beyond trade. Notable areas of progress in terms of international agreements include nuclear proliferation, climate change and financial stability. Supporting this dynamic has been the reactivation of key international institutions, starting with the WTO, which had suffered in the protectionist wave of the 2010s and has seen its support and scope expanded. However, not all intergovernmental organizations have survived, as some of the old institutions have failed to adapt institutionally to the changing geopolitical landscape and have lost out to new competitors. Much attention was given also to a reform of the international health order (including but not limited to the World Health Organization (WHO) after the COVID-19 pandemic and the vaccine disarray exposed its flaws (Bernes, 2020).

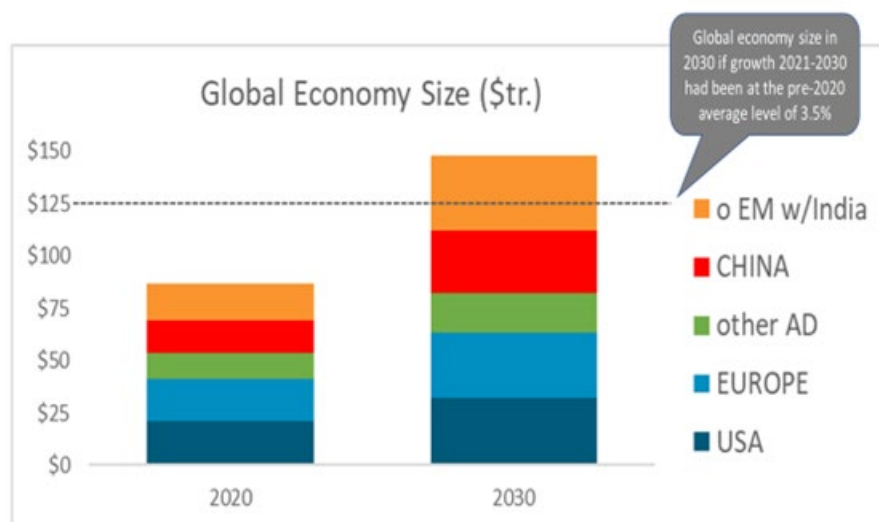
The stable international environment has also allowed for cooperation in terms of technology, with reciprocal restrictions between American, Chinese, and European companies fading away. In this context, it became easier to alleviate semiconductor shortages and other supply bottlenecks, and the mix of competition and cooperation resulted in an increase in technical innovation, output, and productivity. The traditional advanced economies and some advanced-emerging ones have seen many former blue-collar jobs replaced by automation – some of this has helped with the impact on labour forces of aging populations but it has also required efforts – not always successful – to develop policies of education and acquisition of skills to ease the pains of the technological transition. This has had important implications for the inclusiveness



of growth and development, with certain sections of the population falling behind and adequate social protection systems lacking. At the same time, the powerful technological companies that started to gain relevance at the beginning of the century have increased their powers. Untamed by anti-trust efforts, they represent a source of admiration and fear, with their massive investment in research and development (R&D), their technological advances, and their global presence.

These developments, however, have not been kind for all countries. While peace amongst superpowers has been achieved, civil wars and ethnic conflicts in certain regions are still common. Both China and the US have refrained from promoting “regime changes”, but a combination of new and old threats, such as data colonialism, cyberattacks, and terrorism, has hampered the development of several countries. With the lack of enough checks and balances in the actions of digital empires, unfair practices continue across the world, and developing countries feel like they have been left behind.

*Figure 10 Size and composition of the global economy in the Rising World Scenario*



By 2030 the global economy is about \$23 trillion larger than it would have been had growth rates in 2021-2030 been similar to those of the pre-2020 period (indicated by the \$125tr line in the chart) and economic growth looks set to be strong through the decade ahead. As a result, the global per capita income average increased by an impressive 47% over the 2019 level, and the ranks of the global middle class have greatly expanded – albeit the numbers are still coming mostly from China and a few other fast-growing large countries.

The economies of Europe, the US, and China are now of roughly equal size – each accounting for over one-fifth of the world’s economy, but the fastest growth, even higher than in China, has been in many emerging economies. Global per capita income in constant terms in 2030 is almost 50% higher than in 2019 and disparities across countries continue to be reduced as most parts of the world benefit from revitalized trade – with a positive impact on exports of manufactured goods, services, and commodities alike. The exception are oil-dependent countries as prices rose during the recovery from the pandemic, then stabilized in the mid-2020s around \$40, and kept declining to \$25 because of a greater emphasis on renewables,



conservation, and reduced emissions – as well as a rush by a number of countries to cash in oil reserves before it is too late.

The global picture appears to be one of reduced income inequality, but at the national level the story is quite different. While disparities in per capita income across countries generally narrowed in recent decades, and that trend continued through 2030, domestic income inequality had been increasing in most countries and this expanding gap has continued to grow through 2030 – and remains a major source of social dissatisfaction. In this context, the distributional effects of growth are increasingly scrutinized, and there is growing concern with the pace and inclusiveness of economic development. Beyond 2030, growing inequality and mounting social tensions are dark clouds in this world's horizon.

The reinvigoration of trade – including services – and resurgent global supply chains are fuelling improved economic efficiency in many sectors. The ratio of trade over GDP in 2030 is back to high record levels established pre-2008, and most of global trade is taking place across regions – as the share of intra-regional trade has dropped from about 50% pre-2020 to just over 40% in 2030. The benign international environment has diluted concerns over supply chain resiliency that had been prominent in the wake of the 2020 pandemic. In this context, Sub-Saharan Africa – except for oil-dependent countries – has fared well thanks to both commodity prices and opportunities from the renewed off-shoring dynamics from advanced economies.

After some trembling years in the decade of the 2010s, there are more democracies than ever in the world, contributing to a stable international environment. This new wave of democratization contrasts with the rising power of digital oligopolies. Unbound by the laws of the land and extending throughout the globe through a myriad of headquarters, affiliates, and terminals, they have become “empires” in their own right. Without strong anti-trust measures, after initial pushes from China, the EU, and the US at the beginning of the 2020s, companies such as Amazon or Google have enormous powers over jurisdictions in many territories across the world.

The growth of these companies came through their massive investment in R&D at the beginning of the decade. Although Amazon already spent more than the Defense Advanced Research Projects Agency (DARPA) in the US, the world post-COVID offered a chance for more online retailing, social networks, and all types of online activities (Schilirò, 2020). The “Internet of Things”, “robotization”, or “bionics” have become common terms for the vast majority of citizens across the world, and given the demographic tendencies, the digital divide is being reduced year by year. Deployment of 5G is complete across the main superpowers, and many are experimenting already with 6G and new forms of quantum computing. Google, Apple, Facebook, Amazon (GAFA) provide technological expertise and implementation of new technologies, at the cost of unaccountability from most of their actions beyond the bounds of national states.

Their continuous presence and influence are based on their utility. Citizens across the world can no longer imagine a world without social media, online shopping, and long-distance relationships. Some of these Digital Empires have even embarked on a sort of new “Space Race”. Liberated from national boundaries, and with governments unable to constrain them, they have been able to influence the development of future anti-trust laws. Not even efforts





such as the Digital Services Act (DSA) or the Digital Markets Act (DMA) by the EU have been able to curtail their power, and no coordinated strategic action by any IO is in sight.

Accompanying the rise of these companies, digital technologies have continued to be embraced by business, governments, and citizens, with most countries opting for modest controls over data, and people inclined to favour connectivity and convenience over privacy. This set the stage for a pervasive implementation of AI and machine learning applications – which have become widely available and affordable “as a service”. AI-amplified human jobs are delivering rapid increases in productivity in a number of industries, and health care and elder care have been transformed by them as well. Blockchain technology has also become widespread and has found a variety of uses in many areas such as data storage, financial transactions, real estate, or supply chain management. This is a field in which China has excelled putting pressure on other countries to catch up.

Similarly, manufacturing technologies have spread widely and played a transformative role, making many sectors more efficient and productive, and providing much competitive advantage – including through resilience – to those who have led their adoption. Countries that focused early on creating the conditions for smart manufacturing to thrive reap rewards – especially if they have managed the transition by fostering the deployment of technologies that work as “co-operators” and not mere replacement for humans. But labour markets have also been transformed – polarized – and the transition process is harsh for many workers, professions, and regions.

At the same time as constructive international engagement has grown, in many countries the national politics have become more local. Citizens have increased trust in regional or local governments, and they become relatively more powerful vis-à-vis the central government that was seen as too distant and harder to influence in recent crises. Mayors and other local elected officials have expanded powers including managing both the revenue and expenditure side of budget. While regions also gain from this restructuring of political and administrative jurisdictions, cities are the major beneficiaries with big cities playing a particularly important role, reinforced by international city alliances. Climate change is another area where progress has been made. Governments remain committed to the UNFCCC process, but it is the private sector that has taken the lead in driving the ‘green’ transition. Thus, private law and international private treaties have become commonplace, and public-private partnerships are thriving. Geoengineering, in particular, has received much attention, and carbon dioxide removal initiatives and solar radiation management have become an important pillar of the climate strategy. However, little attention has been paid to changes in consumption patterns and lifestyles, and the intense use of resources associated with the digitization and automation of the economy and with high levels of economic growth have raised serious questions about the impact of technological fixes.



### **Voices from the Rising world of 2030**

*While it looked, barely a decade ago, like globalization was a dead-end and private enterprise was under siege it was a nice surprise to see that our efforts to get recognition of the critical role that global enterprises play in generating prosperity for all. Shifting our outreach to the increasingly powerful cities also helped create new layers of globalization and economic alliances.*

Michael Fernández, American lobbyist

*The spread of additive (3D) printing, AI and machine learning have created an opportunity for further productivity-enhancing fragmentation of global supply chains. Luckily in both sides of the Pacific we were pragmatic enough to overcome the protective tendencies of the early 2020s and are finding ways to get along without conceding too much to take advantage of this opportunity. Our rapidly aging labour force is a challenge we need to overcome in a world that belongs to young digital-savvy talent.*

Lei Jie, Chinese economic journalist

*There is a lot of opportunity nowadays, but it seems to elude us. Lagos keeps getting more and more powerful and we struggle to be heard by the federal government. We are losing our more talented young people who are attracted by the big city—and even see it as their springboard for the world. Nothing that we have tried—even with help from top consulting firms to design programs—seems to get enough traction but we keep trying because the opportunity is there.*

Akin Tako, Governor of a landlocked Nigerian State

### **5.3.1 Incremental Global Governance**

Due to fluid intergovernmental relations and good relations between superpowers, multilateralism has revived in this scenario, and cooperation has extended to a few areas, including financial regulation, climate change or health. A process of hybridization has given a greater role to sub-state authorities (particularly megacities) and for-profit non-state actors, such as digital corporations or MNEs. In general, progress in this world can be said to be incremental, and for the most part the old FIGOs have retained their influence, albeit with some reforms and whilst facing increasing contestation from emerging powers and Southern countries.

Trade governance is again characterized by multilateralism and the promotion of free trade, with the WTO having revived, but the area of development is increasingly privatized, and development institutions such as the WB or the AIIB find themselves increasingly marginalized. Progress has been achieved on climate change, particularly with regards to technological innovation for mitigation and adaptation. However, there are doubts about the impact of these developments given the high levels of economic growth. Global financial regulation has also progressed to some degree, with greater coordination between regional

orders being promoted by the FSB. In addition, the UNSC has managed to break its gridlock and the frequency of use of the veto has decreased.

Despite good relations between countries and superpowers, there are also sources of instability in this world. To begin with, the international order faces increasing contestation from emerging powers vying for more influence, such as India. Further, non-state actors in failed states have arisen as important security threats, as well as increasing cyber-attacks.

### **5.3.1.1 Climate**

After some difficult years, large intergovernmental fora and institutions are becoming increasingly relevant again. The UNFCCC has been revived, driven by the US-China tandem, which is pushing cooperation forward. The ratchet mechanism of the Paris Agreement is working as intended, with countries increasing their ambitions in each submitted NDC. Further, a hybridization process is underway, whereby NSAs and sub-state authorities, particularly MNEs, energy companies, and cities, are increasingly included in talks at the UNFCCC. Aided by the high relevance of the private sector, technology drives the transition in this scenario, and there are hopes of a 'techno-fix' to climate change. Changes to lifestyles and consumption patterns, environmental justice issues, and ideas about decoupling economic growth from resource use are notably absent from the agenda.

The private sector has acquired an outsized role in this world. Big tech firms are highly involved in devising new or improved energy technologies for mitigation and create PPPs to push these technologies forward, both in terms of R&D as well as standard-setting and market creation. These firms also provide data services so that countries can optimally design and implement their adaptation strategies. As private NSAs have become more relevant, so has self-regulation. Private law has become more common, and there are fears that this might lead to a hollowing out of public law, to be replaced by informal private law.

Sub-state authorities, particularly cities, have also acquired a strong role beyond implementation of national policies. Cities and megacities, organized in transnational networks, are increasingly advancing their own policies for adaptation and mitigation, and they are an important site of bottom-up experimentation.

NGOs are taking a more assertive role as well, by engaging in adversarial and confrontational tactics. For instance, a commonly used tactic is naming and shaming individuals', states', and companies' emissions profiles, taking advantage of the lax privacy controls in this world. Trade unions, on the other hand, are vocal against the green transition. The combined effects of smart manufacturing technologies, digital technologies, and the green transition on the labour market, and the absence of strong social protection systems to ease the transition, have sparked fierce resistance from trade unions and workers whose jobs are at risk.

There are also serious doubts about the effectiveness of existing policies and NDCs. As economic growth rates are high, and the adoption of smart manufacturing and digital technologies is advancing rapidly, resource use has been increasing. The deployment of green technologies also tends to be resource intensive. Thus, there is a discrepancy in this world between climate action and impact.



Overall, climate governance in this world is less state-centred and has undergone a process of hybridization whereby the private sector and sub-state authorities, particularly megacities, are increasingly involved. There is multilateral cooperation, driven by the good relations between superpowers, and the focus is placed on technologies for adaptation and mitigation.

There is little concern with climate justice issues, and many risk being left behind in this green transition. Further, many warn that the high levels of economic growth and resource use offset intense levels of climate action, reducing the impact of climate initiatives to below what is necessary to keep global warming in check.

### **5.3.1.2 Finance**

Good relations between the two superpowers and generally fluid intergovernmental relations have allowed for cooperation on financial regulation, though pretensions of setting up an overarching global financial organization are still a distant dream. Although regional differences have converged to some degree, regional financial orders have continued to evolve separately for the most part.

A modest Basel IV agreement (particularly modest around the regulation of non-financial companies and fintech actors in capital markets), has been implemented by the Bank for International Settlements (BIS). The BIS remains a key player in global financial governance (Zhang, 2020), but it is increasingly contested by emerging powers, who call for deep institutional reforms to reflect the changing geopolitical landscape.

The same can be said of the International Monetary Fund, which has managed to stay mostly untouched despite continuous calls for institutional reforms. The IMF, however, is facing increasing competition from regional arrangements. Separate regional financial arrangements (RFAs), which are increasingly coordinated and institutionalized, have continued to evolve on their own. The Chiang Mai Initiative Multilateralization (CMIM) launched by ASEAN has been delinked from the IMF (Grimes & Kring, 2020; Henning, 2006). Further, the Macroeconomic Research Office (AMRO) and CMIM have been combined into unified institution, with greater resources and authority, and improved surveillance and economic analysis capabilities (Henning, 2006). In the EU, after long and difficult negotiations, progress towards establishing a European Monetary Fund is finally underway, and in Latin America, the Latin American Reserve Fund (FLAR) has increased its reserves and expanded its membership, which now includes Argentina and Mexico (Henning, 2006).

The Financial Stability Board has also strengthened its position in global financial governance. As a central coordinator, it aims to reduce functional differentiation between issue areas, and to improve coordination between regions.

Not everything has been successful in this world, however. There have also been some setbacks. Namely, with respect to the global tax floor. Whilst talks in the beginning of the decade had seemed very encouraging, negotiations soon soured, and tax havens have remained a sticky issue in the global agenda up until 2030.



In general, financial governance in this scenario is characterized by the development of RFAs. Whilst remaining informal overall, there has been some progress towards further institutionalization in some of these regional financial arrangements. Global financial governance is also less fragmented now, as the strengthened role of the FSB has allowed for greater coordination. However, it remains highly minilateral, with a few major actors dictating the course of events. This has sparked tensions with emerging powers, whose patience is waning.

### **5.3.1.3 Trade and development**

The World Bank and the Asian Infrastructure Investment Fund find themselves in a very competitive environment due to the proliferation of new actors, notably NSAs. Private philanthropy has emerged as an important source of development finance, but more importantly, the private sector has increased its participation and influence in the area of development and is now involved in large-scale development projects. Thus, the WB and AIIB are forced to compete with private finance actors who are expanding the scope of their activities, and as a result, development banks are increasingly marginalized.

With the reinvigoration of trade, the WTO was finally reformed, albeit with limited success. Whilst disputes over the Appellate body were temporarily resolved, the organization remains dominated by major players, which calls into question the effectiveness of institutional reforms. Still, countries are once more on board with a multilateral approach to trade governance, and the trend towards bilateralism has been reverted.

Extra-regional trade has continued to increase, and even the African Union has reverted its Agenda 2063 focus on intra-regional trade. It has also benefitted from renewed offshoring dynamics. However, it has difficulties dealing with big digital corporations. The great powers of digital corporations have allowed them to escape regulation across many jurisdictions. Anti-trust efforts at the beginning of the decade failed to reign in these corporations, and by 2030 they seem almost untouchable. They provide valuable services for governments, and contribute massive investments in R&D. However, they are also able to engage in unfair practices, such as data colonialism, whilst escaping accountability. This has been a great problem in countries where the digital gap is most extensive.

Whilst new free trade agreements are signed and RTAs begin to converge with each other, strict regulation over women's rights, labour rights, or sustainability standards is for the most part absent. Due to the increasing relevance of private actors, voluntary standards have proliferated, but the power of MNEs has allowed them to pre-empt strict regulation and therefore, existing efforts for the most part reflect the minimum common denominator.

The governance of trade and development in this scenario is characterized by a renewed embrace of multilateralism and the increasing relevance of for-profit NSAs. The development field has become very competitive, and development banks are increasingly marginalized due to the emergence of private finance actors. However, free trade has become the norm again, and the reinvigoration of the WTO has signalled a return to a rules-based international trade governance.

#### 5.3.1.4 Security

The revival of multilateralism has brought renewed strength to the UN, especially in areas connected to public health. Good relations between the superpowers have allowed the UNSC to escape gridlock, and the prevalence of intra-state conflicts has endowed it with a greater role. Further, the use of the veto is not as prevalent as it once was, although the democratization wave spreading around the world has caused occasional fears in Russia and China. Despite all this, the UNSC still faces severe criticism, as it remains unrepresentative and thus faces legitimacy issues, with emerging powers increasingly contesting the current balance of power.

Whilst the NPT remains in place, it is threatened by NSAs in conflict areas. Thus, failed oil-producing states that have degenerated into zones of civil conflict remain high on the UNSC's agenda. In spite of the danger NSAs such as warlords or terrorist networks pose to the NPT, a noteworthy development has been that the pillar of disarmament has finally gained traction due to cooperation between the US and China. As a result, nuclear stockpiles are decreasing.

NATO has stayed relevant as Russia is still considered a threat by the US and allies, but perceptions of China as a threat have lessened. This has also lessened frictions related to defence spending, as the US seems content with the status quo given that it faces no clear confrontations, and it does not contemplate large-scale foreign interventions. The African Union, on the other hand, faces a barrage of civil conflicts in the region. However, the strong development of some of the SSA countries increases funds and options to send in missions for conflict prevention, resolution, and stabilization, often in cooperation with the UN.

Importantly, as the number of cyberattacks continues to increase, informal intergovernmental organizations have developed for information sharing on NSA sources of these attacks. Their effectiveness is nevertheless limited. Further, whilst superpowers have reached some basic, informal understanding regarding cyber warfare against each other, they still exploit their capabilities in this realm to destabilize minor powers.

Terrorist organizations are also on the rise, as discontent rises along with domestic economic inequality. However, military strategies are still favoured instead of comprehensive approaches that consider the needs of the local population. Big tech corporations have also been involved in the fight against terrorism. For instance, GAFA have collaborated to auto-regulate and prevent terrorist acts that use their platforms. They have also been involved in self-regulation of some weaponry, such as lethal autonomous weapons.

In this world, states have retained much of their importance in security governance, but global corporations have acquired an outsized relevance as well. This is particularly the case when it comes to big tech corporations, though private security contractors have become powerful too. There has been a return to multilateralism and cooperation, although this is not always effective.





## 5.4 Flowing

*In this 2030 world, international relations are no longer characterized by their contentiousness and confrontations have become rare. As the world evolved from bipolarity to multipolarity, progress was made, including some trial-and-error attempts, to create new platforms for global dialogue and cooperation. Domestic politics in many countries have managed to evolve in ways that address citizen preferences for more participatory processes – and for strong privacy protection, even if it comes at the expense of convenience and productivity.*

Economic growth has been steady, and prospects remain modest, but both consumer and business confidence are healthy. There is growing concern about climate change and a heightened sense of urgency about its damaging effects, with governments, businesses, and citizens “walking the talk”, implementing policies, and adopting habits to remedy the very serious situation reached by the early 2020s and the extremely worrisome prospects. Thus, broad transnational coalitions across intergovernmental institutions, national governments, sub-state authorities, civil society organizations and the private sector have further strengthened into an increasingly polycentric governance centred around the UNFCCC.

After a slow, tentative re-start of their relationships soon after Biden took office, the US and China have gone through an extended period of improved dialogue and cooperation. Other major countries have increased their global relevance and conform a multipolar environment where multiple voices are heard, and alliances are fluid. Although the US and China remain as the most advanced powers in technological and military terms, the EU and a steadily rising India do not trail very far away.

This has been a propitious environment for improving inter-governmental platforms for dialogue and cooperation, and by 2030 a more inclusive and transparent successor to the G20 has been functioning for several years. The Biden and subsequent US administrations have been involved in the new platforms but with limited enthusiasm as international engagement is hard to treat as a priority in an ever polarized and fractious US political situation. There has also been a proliferation of non-treaty based organizations – some of which include governments (national and local) as well as NGOs, foundations, and private sector leaders.

In an environment of growing international trust and dialogue, we also have seen the reversal of a trend of democracy in retreat that was amongst the most worrying signs of the 2010s and 2020s. After a tough start, the fight against the COVID-19 was finally successful, leading to a betterment of economic prospects for almost all nations, as well as more redistributive policies. Steps towards a fiscal union in the EU helped in consolidating democracies in the West. Better life conditions, a more stable international environment, and the consolidation of sound institutions in many emerging and developing nations helped in the toppling of several autocracies, in a process helped by a diffusion effect between democratic activists in different countries.

The pandemic shock and the tensions around vaccine development and distribution proved a wakeup call on the vulnerabilities derived from fractious international relations. The spirit of cooperation dynamics that first applied to health subsequently extended to most domains. In





addition, the connections between human health, biodiversity, climate change, security and migration are subject to increasing scrutiny by national agencies and international organizations. Issue-specific international organizations publish joint publications on nexus issues and negotiation processes in different fields become explicitly connected. Further, by 2030, agreements have been reached – or plans are well advanced – on, for instance, decarbonization, intellectual property or privacy protection. Cooperation on renewable technologies has also provided a boost to alternative sources of energy.

In a world where data has become one of the most important assets, AI applications have made quite a leap by 2030, and the Internet of Things has become pervasive – with sweeping implications for B2C, G2G relationships as, finally, a large majority of the world's population is connected to the internet. The pandemic has also encouraged the development of the digital economy (Schilirò, 2020), with more people than ever working from home, business travel being substituted by videoconferences, consumers moving towards online channels, and companies digitizing supply-chains. The digitization of the economy has brought with it numerous advantages, such as a decrease in the cost of doing business across borders or vast improvements in efficiency. However, it also poses many challenges, as it quickly has become clear that there are many who risk being left behind in a digitized world. Thus, many governments have recognized the importance of accompanying digitization with inclusive and well-coordinated policies that can ensure a broad access to opportunities and incentivise innovation and productivity growth across many activities, including public services. Further, adequate social protection systems, redistribution policies, and re-skilling initiatives have helped ease the transition for many workers whose jobs have been automated.

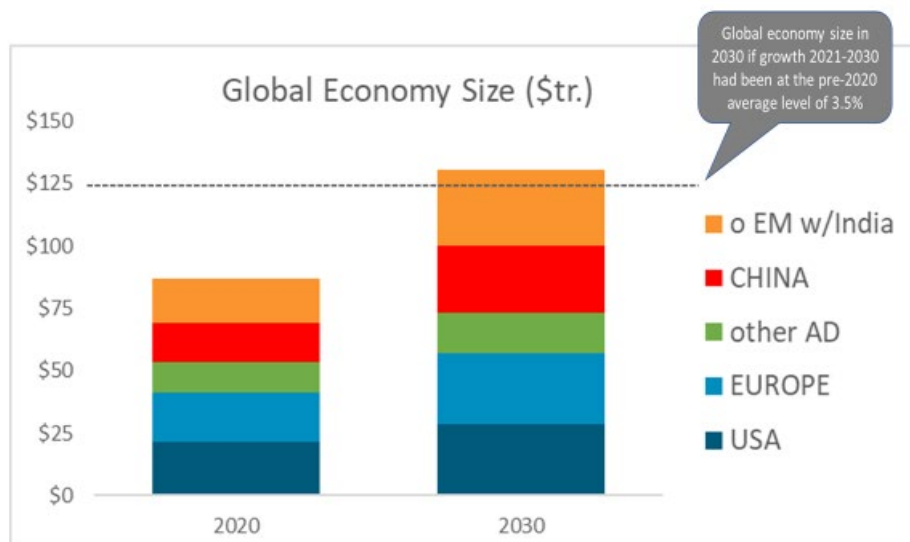
On the other hand, the rate of adoption of 'smart' manufacturing technologies is slow compared especially to the high expectations that were commonplace at the start of the 2020s. The hurdles of relative cost (especially for SMEs), complexity, and reliability are compounded by regulatory actions reflecting voter and union pressure to block the replacement of human labour by robots and other machines, and to prevent excessive power being vested in a small number of tech-nerd staff relative to the larger numbers who work conventionally. By 2030 the global economy is about \$6 trillion larger than it would have been had the growth rates during 2021-2030 been in line with the pre-2020 average (indicated by the dashed line in the chart). Into the 2030s the world is on a sound growth path – even though the pace of 'smart' manufacturing technology adoption remains slow. After a slow, difficult post-COVID recovery (including because of increased debt levels) a gradual thaw in intergovernmental tensions and recognition of the benefits of open competition have resulted in a re-globalization of supply chains and lessened protectionist disruptions – creating a more stable basis for global economic activity. This re-globalization dynamic has been accompanied by a greater concern for ethical supply chains, with civil society organizations becoming more involved in trade governance. As a result, concern for sustainability standards, labour rights, and in particular, the rights of women have increased. This has contributed towards greater efforts to improve women's conditions of employment and to reduce gender-based inequalities in relation to education, health, and training.

Trade has grown slightly faster than GDP across the world so that the trade/GDP ratio has even surpassed the peak of the pre-2008 years. Whilst the intra-regional share of global trade



has been decreasing slowly after 2022, the ratio of extra-regional trade over global GDP has reached 32% compared to 30% in 2020.

Figure 11 Size and composition of the global economy in the Flowing World Scenario



Slower growth in China together with a strong economic performance in India and a few other emerging countries plus a modest resurgence in Europe have resulted in fluid, unsegmented economic interactions. The GDPs of the US and broader Europe are both roughly the same size and China's GDP is not far behind. Average per capita GDP for the world is 30% above the 2020 level and the gains are widespread as growth in the second half of the 2020s turned out to be more than an Asian story – with a few Latin American countries and many African countries having strong economic performances. As a result, the possibility of overcoming the North-South divide seems finally within reach, and such positive expectations have contributed to a betterment of intergovernmental relations across regions.

Both inter-country and intra-country inequalities have been reduced – in a “pas de deux” that had not been seen for a long time. The modest but encouraging reversal of income inequality within countries has been achieved as more progressive taxation was able to reallocate gains by the top quintile of households towards funding transfers and social programs that disproportionately benefited the bottom quintile of households.

There has been a sustained expansion of public expenditure at all levels of government, building on the stronger support for the expansion of government functions that had been necessary in response to the 2020 pandemic. A strong current of public opinion supports additional taxation for expanded safety nets – including in many cases Guaranteed Minimum Income schemes – with governments taking a bigger role in the life of citizens. In this context intrusions in the private sphere are perceived as legitimate insofar as they take place with the safeguard of participative decision-making processes and contribute to a higher level of security in all aspects. The main drawback is that public debt levels have reached

unprecedented levels, inflation has started to increase, and, reversing the long period of low interest rates, the cost of servicing the debt is increasing significantly.

By 2025 travel was back to pre-2020 levels – both leisure and business travel growing again since then – helped by the reassuring factor of increased reliance on alternative, cleaner fuels. Demand for cruise travel, in particular, has skyrocketed as cruise companies have won the confidence of travellers by successfully showing that they can adopt preventive protocols and quick remedial action. Business travel had been expected never to recover given the time and cost-saving experience of using video meeting apps, but it is again growing steadily as old reasons for in-person meetings and client visits proved to be resilient.

The fluid balance of power means that alliances are constantly evolving and creates an environment more propitious to international agreements, but also one of considerable complexity – which makes significant demands both on governments and on companies that operate globally and need to stay abreast of evolving arrangements. Further, the global governance architecture becomes increasingly hybrid, with non-state actors and sub-state authorities becoming ever more relevant, a proliferation of organizations comprising multiple membership types (international organizations, states, cities, regions, companies, etc.), and classic intergovernmental organizations engaging in multiple orchestration efforts.

The fact that the Chinese economy settled through the 2020s at a pace of growth that was solid but far below the hypergrowth that had fuelled grand ambitions resulted in a scaling back of many programs and of the extensive foreign partnerships around them. Solid growth performance and enhanced confidence in the future of the EU and the related consolidation of the “Strategic Autonomy” approach has also been a factor – after Brexit proved easier to digest for both sides than expected and internal divisions in the EU were patched up as the 2020s progressed. This is a world of fairly open competition with generalized recognition of the overall benefits of free markets and of establishing level playing fields – reversing the trend of the late 2010s towards protectionism and mercantilism.

Similarly, there have been a lot of transnational initiatives to limit the power of digital empires, avoiding what has been called “data colonialism”, or the ability to escape accountability from national enforcement and courts. Although digital technologies are on the rise, and the number of smartphones has increased dramatically even amongst the worst off, both the GAFA and Baidu, Alibaba, Tencent, Xiaomi (BATX) have seen their power diminished by strong regulating action. However, they remain powerful and as gatekeepers of many companies in their sectors, and many countries have engaged in public-private R&D agreements with them to boost the implementation of certain technologies.

Notably, efforts in the beginning of the 2020s to introduce a global corporate tax floor, though difficult to implement, proved moderately successful. Although some tax havens have found loopholes and continue to exist, this is an area where progress has been made. However, there are still some disputes regarding the re-location of the headquarters of some prominent companies, and this remains an important pending item in the international agenda.

There is a growing sentiment of support for a rules-based world order and for institutions that embody it. Although in this multipolar world there are disagreements about the exact content of those rules, there are some areas where an overlapping consensus has been built. Theories



of democratic peace are widely discussed, as the rising number of non-autocratic political systems seems to be correlated with a descending use of political violence. Interstate wars are scarce, and more concerted action by the Security Council (which has seen a significant drop in the frequency of vetoes, having agreed on new rules to limit their use) and the UN as a whole has helped to lessen ethnic, religious and, in general, societal violence. This has also helped reduce the number of fragile states, allowing for a flourishing of state capabilities.

Civil society has clearly proven itself capable of acting across borders, with particular causes and issues spreading rapidly through sophisticated use of technologies. Citizens have become more involved in global governance as democracy has flourished and there have been experiments with more direct forms of participation. Governments at all levels have opened up new channels of participation to complement traditional mechanisms of representation, such as voting, improving civil society engagement across multiple dimensions. A more “institutionalized” form of political activism has taken hold, where governments at various levels and political parties moved to preventing unrest by accommodating key demands and providing citizens with options for a more direct democratic experience. In a context of lessening inequality, social movements came to also allow that a calmer route, with peaceful actions and acknowledging the legitimacy of traditional actors, is a more efficient approach to fulfilling their goals.

### ***Voices from the Flowing world of 2030***

*I feel very lucky taking the helm of WTO at this juncture—following on the footsteps of my predecessor who managed admirably to take advantage of new winds of international cooperation to re-launch WTO and set it on a course for greater influence as a positive force in world economic affairs.*

Benigno Quezon, former Philippine minister and incoming WTO DG

*Yes, things are better now in India. A few years ago, I was scared about the rise of nationalism and the tensions in the border. But those look like ghosts from an age that is behind us. Obviously, the world is an ever-changing place, but I feel that we have now understood the benefit of tackling problems together. It has helped with the pollution here, and the economy is booming, so people are encouraged, and the government enjoys support for its deft handling of international alliances and recognition although there is reason to worry about the central government having become too strong and intrusive.*

Ayesha Gupta, head of the Institute for Indo-Asian Studies

*As a South African bank active in the whole continent, we have seen many signs of an economic renaissance the last few years. There are less conflicts and more opportunity—including because of FDI. And African voices are being heard more carefully now in the global scena. But many country’s institutions are still a bit fragile; we are not making fast enough progress in educating our large pools of young people; and levels of debt are still high, and we cannot stop borrowing.*

Mamphela Motsepe, Chief Executive Officer (CEO) of PanAfrican Bank

### 5.4.1 Transformational Global Governance

Global governance in this world is characterized by multipolarity and the return of multilateralism. Emerging powers are better incorporated into the global governance architecture. The old institutions have been reformed to adapt to the changing geopolitical landscape and replaced or complemented by new ones. There is more trust in formal intergovernmental organizations, and the trend towards bilateralism or minilateralism seems to have dissipated. Broad, transnational movements or coalitions on specific issue areas have also emerged.

Progress has been made in many areas, as cooperation is widespread. A coalitional, polycentric climate governance has emerged, where NSAs such as NGOs or sub-state authorities are thoroughly included. Free trade and the WTO have revived, and greater concerns with ethical supply chains have led to the inclusion of gender, labour, and sustainability issues into trade deals. Greater coordination and cooperation between development banks has been achieved thanks to the establishment of an umbrella development organization. Finally, the UNSC has achieved greater coherence and the use of the veto has declined, resulting in more responsiveness and less inaction.

Not all has been positive, however. With regards to global financial governance, little progress has been made. Governance has become less fragmented and minilateral thanks to the strengthening of the FSB and some institutional reforms in the BIS and IMF, but overall it still remains informal, minilateral, and fragmented. Similarly, efforts at the end of the decade to establish a cybersecurity intergovernmental organization seem to have failed.

#### 5.4.1.1 Climate

The rulebook for the Paris Agreement is by now fully agreed upon. After a number of years, and after the first global stocktake, the dismal maths made it clear that much more mitigation and adaptation ambition was necessary. NDCs submitted in 2025 and 2030 are much more ambitious, and although the 1.5 target is no longer attainable, 2 degrees appears in sight. A separate UNFCCC agreement, specifically on adaptation, has been reached. It involves information sharing, enhanced finance, and advanced data gathering so the optimal adaptation measures are put in place in each location. Further, developed countries are now meeting their finance targets, though developing countries continue to highlight the need for more funding. Overall, good progress has been made towards meeting NDCs.

The IPCC is no longer under undue pressure to produce politically acceptable synthesis reports. The periodic Assessment Reports (ARs) and special reports have a large impact and lead to civil society mobilization. A new IPCC-type organization was also created to investigate the science related to geoengineering, and later its mandate was extended so that it now works towards regulation of their use.

Much climate action is also taking place at the regional level. The EU remains a climate leader, and it has managed to align its COVID-19 recovery package with the Paris Agreement and the European Green Deal. The African Union has also made great strides. Regional solar power projects have been developed, especially in East Africa, thanks to a strengthened East African Centre for Renewable Energy and Energy Efficiency (Chisika & Yeom, 2021). Progress has also been made towards the Great Green Wall of the Sahara and the Sahel.





The Global Leadership Group (GLG), a more inclusive successor to the G20 with a mechanism for rotating participation by smaller countries, has maintained a strong focus on climate action. Its main challenge, however, has been easing the geopolitical tensions arising from the energy transition. As more renewables are deployed, tensions spark around critical minerals, land use, or water use, among others.

Cities and sub-state authorities have increased in relevance. Cities are organized in transnational networks, and they carry out coordination and implementation functions. NGOs, activist groups, and grassroots movements are very active, and they have strengthened into a broad transnational climate movement, inclusive of Southern nations. Even consumers have become activists, and boycotts are common when companies do not make ambitious climate commitments or do not live up to the ones they make. Companies, therefore, are pushed towards making ambitious commitments to reduce emissions and walk the talk.

Climate governance has undergone a process of hybridization, with NSAs, especially civil society, gaining more relevance. Even the creation of a UNFCCC citizens General Assembly (GA) on climate change is underway. This has increased the multilevel complexity of the governance. As these varied actors at different levels of the governance architecture interact, increasing multilevel convergence can also be observed, and global governance further strengthens into a hybrid, coalitional, and polycentric architecture centred around the UNFCCC. The focus of climate governance has also broadened to include environmental justice issues, and reparations for irreversibly damaged nations are now being negotiated.

#### **5.4.1.2 Finance**

Concerted regulation of finance has not progressed as fast as other areas of global governance. Still, although there have been no sweeping reforms of global financial governance, after Southern countries and emerging powers pushed for change, key institutions have been reformed to become more inclusive. The Bank for International Settlements (BIS), though it remains relatively exclusive, has altered its opaque institutional structure to better incorporate emerging powers. The same can be said of the IMF, which has undergone a series of institutional reforms to reflect the changing geopolitical landscape in this multipolar world.

Regional financial orders have continued to evolve separately for the most part. ASEAN, for instance, has strengthened the Chiang Mai Initiative Multilateralization (CMIM) and it has significantly increased the delinked portion from the IMF (Grimes & Kring, 2020; Henning, 2006).

The Financial Stability Board (FSB) has gained strength as a central coordinator, and it has managed, to a certain degree, to reduce functional differentiation and improve coordination between regions. This has contributed to reducing the fragmentation of global financial governance, and the institutional reforms passed at the BIS and the IMF have also contributed towards a less unilateral governance. Overall, however, it still remains informal, unilateral and fragmented. Notably, civil society organizations are increasingly involved in financial



governance. They have mostly been involved in monitoring but are now shifting their focus towards regulation.

#### **5.4.1.3 Trade and development**

In this multipolar world, the World Bank has reformed its institutional structure to alleviate the concerns of emerging powers vying for more influence at the bank. It has also struck a balance with other development institutions, and a division of labour arrangement now exists between the World Bank, the New Development Bank, and the Asian Infrastructure Investment Bank (AIIB). Regional development banks have also continued to thrive, and in a surprising turn of events, an umbrella organization has been created to coordinate and manage the activities of RDBs. This has contributed towards greater coherence of development policies, and it has allowed for more synergies to be exploited.

After a difficult start of the decade, the WTO was finally reformed and is now in full swing. The conflict over the Appellate body was satisfactorily resolved, and new rules regarding state owned enterprises (SOEs) were incorporated. In this context, trade governance enjoys a level of coordination not seen before, and the ghosts of protectionism have been steadily fading. Regional trade agreements now begin to connect with each other, following a trend of increasing one-level convergence. Talks are also underway for a number of inter-regional agreements, such as the Euro-African Trade Partnership (EATP). Further, concerns over women's rights, labour rights, and sustainability are commonly incorporated into trade deals, signalling a turn towards more inclusive, transparent and fair trade deals.

The G20 stopped meeting after emerging powers and Southern nations pushed for a more inclusive successor, the Global Leadership Group (GLG). The GLG now acts as a multilateral forum for global economic cooperation, and it was instrumental in the process of reform and reactivation of the WTO. The GLG, incorporating lessons from the COVID-19 pandemic, also spearheaded a trade and health initiative aimed at ensuring access to medical goods and improving the capacity of the trading system when dealing with public health emergencies. Whilst debates over intellectual property were also initiated in this context, there was little agreement between countries in the Global North and Global South, and these were eventually dropped from discussions.

The EU, in this propitious environment for international cooperation, has found the impetus to begin plans for a fiscal union. The negotiation process has been difficult and complicated, as not all Member States are yet on board, but prospects look promising.

#### **5.4.1.4 Security**

The stable international environment has allowed for greater coherence within P5 members and between P5 and non-permanent members, resulting in a greater level of responsiveness at the UNSC. The use of the veto has declined significantly, and the UNSC has managed to maintain its legitimacy and authority, although many members continue to raise concerns due to power imbalances in the composition of the organization. There is a consensus on the need to reform the UNSC, but what precise form it should take is still up for debate. Expanding the membership of the UNSC seems feasible, so long as the veto is maintained. Likely candidates for expanded membership are India, Brazil, Germany, and Japan.





With the revival of multilateralism, the UN as a whole has received quite the boost. It is very active in several issue areas, and it increasingly highlights the links between security, health, climate change, and migration.

Progress at the regional level has also been made. There are talks about an emerging regional security architecture in the Middle East, and a dialogue between Iran, Saudi Arabia and the United Arab Emirates has been established. The Shanghai Cooperation Organization (SCO) has also taken a more prominent role, although tensions between India and China remain. NATO has stayed mildly relevant because Russia is still considered a threat. China, on the other hand, is not. Some of NATO's functions have been taken over by the EU, whose drive towards strategic autonomy has resulted in a somewhat stronger CSDP. Where the drive for strategic autonomy has really delivered, however, has been in other areas with an outward dimension, such as health or technology.

With cybersecurity emerging as a key issue in the previous decades, an attempt has been made at creating the first global cybersecurity formal intergovernmental organization. However, after long negotiations that led to an initial framework agreement, ratification proved hard to achieve, to the point that it now remains a dead letter.

Although inter-state conflicts are rare and violence on the whole is declining, civil society organizations maintain a focus on issues of societal violence. In this context, gender-based violence, for instance, has gained more attention.

Overall, states remain the most important actors by far, but CSOs and sub-state entities' role in global governance has increased. Multilateralism has been revived, and there is generalized trust in FIGOs. Confidence building measures have been progressing in some regions, notably in the Middle East, and external actors such as Russia or China do not act as spoilers in these developments. The human security perspective, though not the dominant paradigm, has featured strongly in rhetoric, and increasing attention is paid to the nexus between security and other issues, such as health or climate change.

Table 3, shown below, summarises the governance for each scenario per issue area.



Table 3 General description of Global Governance Scenarios

	Drifting	Shifting	Rising	Flowing
<b>Trade and development</b>	<ul style="list-style-type: none"> <li>Protectionist</li> <li>Bloc affiliated</li> <li>No digital globalization</li> <li>Internet sovereignty</li> <li>New organizations for each sphere replacing WTO</li> <li>Regional organizations facilitating intra-regional trade</li> <li>Development IOs reorient activities towards one sphere</li> <li>Patron-client relationships</li> </ul>	<ul style="list-style-type: none"> <li>Regionalized trade</li> <li>“Old world of trade”, concern mainly for protecting producers</li> <li>No digital globalization</li> <li>Development IOs face significant budget constraints and legitimacy issues</li> <li>Declining legitimacy and effectiveness of Bretton Woods institutions</li> </ul>	<ul style="list-style-type: none"> <li>Trade globalization</li> <li>Supply chain governance</li> <li>Voluntary standards</li> <li>Uneven digital globalization,</li> <li>Dominance of digital oligopolies</li> <li>Influence of GAFA</li> <li>Old/new world of trade?</li> <li>Bretton Woods institutions face resource constraints, legitimacy issues, and competition from new regional institutions/NDB</li> </ul>	<ul style="list-style-type: none"> <li>Trade globalization</li> <li>“New world of trade”, inclusion of consumer protection, cross-cutting issues (gender, sustainability, labour rights)</li> <li>Inter-regional agreements</li> <li>Inclusive digital globalization</li> </ul>
<b>Finance</b>	<ul style="list-style-type: none"> <li>Separate institutions for each sphere</li> <li>Increasingly fragmented, informal, and minilateral (between and within spheres)</li> <li>Heterogeneity from increasingly fragmented regulatory space spurring dangerous financial innovation</li> <li>Regulatory race to the bottom</li> <li>Cryptocurrencies and non-traditional financial actors acquire relevance</li> </ul>	<ul style="list-style-type: none"> <li>Separate regional orders, with limited coordination between them</li> <li>Technocratic cooperation</li> <li>Remains informal and minilateral, but less fragmented</li> </ul>	<ul style="list-style-type: none"> <li>Separate regional orders, with increasing informal coordination between them (regional differences converging to some degree)</li> <li>Push for institutionalization within regions</li> <li>Hybridization (private NSAs), non-financial companies and fintech actors greater role</li> <li>Privatization of transnational regulation</li> <li>Networked architecture</li> <li>Less minilateral</li> </ul>	<ul style="list-style-type: none"> <li>Remains fragmented (RFAs continue to evolve, separately, limited convergence between regions)</li> <li>Informal, but less minilateral (more inclusive architectural core)</li> <li>Decreased dominance of the dollar</li> </ul>

<b>Climate change</b>	<ul style="list-style-type: none"> <li>• UNFCCC breaks down</li> <li>• No climate action at the supranational or state level</li> <li>• Some adaptation efforts at the local level</li> </ul>	<ul style="list-style-type: none"> <li>• UNFCCC ineffective</li> <li>• Little climate action</li> <li>• Informalization</li> <li>• Regional and national/local adaptation efforts in Global South</li> <li>• Some mitigation oriented action, mostly driven by private sector</li> <li>• Sharp North-South divide over climate action</li> </ul>	<ul style="list-style-type: none"> <li>• Techno-fix</li> <li>• Non-institutionalized and increasingly informal regime</li> <li>• Private sector led.</li> <li>• US-China tandem driving transition.</li> <li>• Big role for megacities and alliances of cities</li> <li>• Focused on mitigation</li> <li>• Adaptation efforts at Global South</li> <li>• Fast development of renewable tech</li> <li>• Oligopolistic renewable energy companies</li> </ul>	<ul style="list-style-type: none"> <li>• Polycentric, UNFCCC as central node</li> <li>• Hybrid (high inclusion of CSOs, SSAs, private sector)</li> <li>• Multilateral</li> <li>• Institutionalized</li> <li>• Political solutions and change in lifestyles/consumption patterns</li> <li>• Support for mitigation, adaptation, and reparations for Southern countries</li> <li>• Rise of prosumers</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Two security spheres</li> <li>• UNSC deadlock</li> <li>• Regions become more important, non-institutionalized regional cooperation</li> <li>• Ad hoc groups of countries or merely bilaterally</li> <li>• Cyber-security and migration as important challenges</li> <li>• Intense geopolitical rivalry</li> <li>• Neglect of human security</li> </ul>	<ul style="list-style-type: none"> <li>• UNSC deadlock</li> <li>• Preference for informal configurations, ad hoc groups, minilateral</li> <li>• Fragmentation</li> <li>• High relevance of private sector security providers</li> <li>• Instability, neglect of human security</li> <li>• Challenges: cyberattacks, NSAs such as warlords, social unrest, rogue states, democratic backsliding,</li> </ul>	<ul style="list-style-type: none"> <li>• States retain importance but corporations acquire outsized role (particularly GAFA, tech giants)</li> <li>• Securitization of technology</li> <li>• High relevance of private security providers</li> <li>• UNSC reinvigorated</li> <li>• Regional cyber-security efforts</li> <li>• Data colonialism as new threat</li> <li>• Collaboration at sub-national level (e.g., counterterrorism)</li> <li>• Neglect of human security but greater role for health within security</li> </ul>	<ul style="list-style-type: none"> <li>• UNSC more responsive, coherent, talks of reforms (facing contestation from emerging powers)</li> <li>• Formal regional IOs acquire relevance</li> <li>• Informal configurations lose some relevance but remain important</li> <li>• Track II diplomacy</li> <li>• Less relevance of private security providers</li> <li>• More concern for human security</li> <li>• Ineffective global cybersecurity IO</li> <li>• Higher role for CSOs</li> </ul>

<b>Overall</b>	<ul style="list-style-type: none"> <li>• State-centred</li> <li>• Divided in two spheres of influence</li> <li>• Bloc-affiliated institutions</li> <li>• Strong geopolitical competition</li> <li>• Sharp North-South divisions</li> </ul>	<ul style="list-style-type: none"> <li>• State-centred</li> <li>• Preference for bilateral or minilateral non-institutionalized cooperation</li> <li>• Importance of regions/regionalization,</li> <li>• Sharp North-South divisions</li> <li>• Instability</li> <li>• Democratic backsliding</li> <li>• Failed states, rogue states, conflicts</li> </ul>	<ul style="list-style-type: none"> <li>• High relevance of sub-state authorities and private sector</li> <li>• Multilateral cooperation but also the rise of informal transnational private regulation</li> <li>• Increasing contestation of international order by emerging powers</li> <li>• Uneven digital globalization</li> <li>• High inequality</li> </ul>	<ul style="list-style-type: none"> <li>• High relevance of institutionalized IOs, civil society, and sub-state authorities</li> <li>• Multilateralism</li> <li>• Broad, transnational coalitional dynamics</li> <li>• Transnational social movements</li> <li>• Complex multi-level dynamics</li> <li>• Inclusive digital globalization</li> <li>• Narrowing North-South divide</li> </ul>

## 6 CONCLUDING REMARKS

The objective of this report is to develop four scenarios of Global Governance for the year 2030, which will subsequently be projected linearly to 2050, with special attention paid to the fields of security, trade and development, finance, and climate change.

Four World Scenarios were developed to serve as the foundation for the Global Governance component of the report. Two sets of drivers of change were taken into account in the elaboration of the scenarios. On the one hand, we considered three key premises that are set to have wide-ranging impacts on societies all over the world: demographic trends, technological development, and climate change. On the other hand, and keeping in mind these premises, we identified twelve uncertainties at the international, national, corporate, and social dimensions that will have an effect on global governance in the years to come.

The scenarios developed were chosen on the basis of their plausibility, but they also incorporate counterintuitive elements to ensure a diversity of outcomes and to enable the analysis of a wide variety of possibilities. This required that the scenarios were also sufficiently different from each other. The four World Scenarios developed were named Drifting, Shifting, Rising and Flowing, reflecting the underlying economic reality of each. Each of these scenarios was paired with a scenario for global governance.

Drifting corresponds to the Regressive governance scenario. This is a world reminiscent of the Cold War, divided into two geopolitical blocs and characterized by tense intergovernmental relations and intense super-power competition. Shifting, on the other hand, corresponds to the Disjointed governance scenario, where instability and distrust for multilateralism are pervasive and international cooperation is scant. Regionalism, minilateralism and ad hoc frameworks for cooperation have replaced multilateralism in this world. In Rising, which matches the Incremental governance scenario, super-power dynamics are fluid, enabling more cooperation at the international level. However, the governance structure of this world has done little to include emerging powers and the Global South, and thus faces challenges to its legitimacy. Importantly, this world is also characterized by a marked increase in the importance of sub-state authorities and for-profit non-state actors in the process of global governance. Finally, Flowing, a world where confrontations have become rare and international cooperation is widespread, is characterized by Transformational global governance. In this scenario, key intergovernmental organizations have been reformed and new ones have been created to allow for a more inclusive global governance process, by better accommodating for emerging nations and the Global South, as well as by including a range of non-state actors.

Each of the scenarios presents a different set of challenges that policymakers need to be prepared to respond to. The difficulty here lies in designing policies that are resilient, capable of adapting to the changing geopolitical landscape and of dealing with a range of issues that can arise in the different possible futures.



## 7 BIBLIOGRAPHY

- Apaydin, F., & Roger, C. (2020). *Blurring boundaries: (In)formality and the governance of global financial markets*. Horizon 2020 GLOBE Work Package 6 Report.
- Bernes, T., Brozus, L., Hatuel-Radoshitzky, M., Heistein, A., Greco, E., Sasnal, P., ... & Caballero-Anthony, M. (2020). Challenges of global governance amidst the COVID-19 pandemic.
- Broude, T., & Haftel, Y., (2020). *The global investment regime and state regulatory space: Assessing the governance role of the European Union and its Member States*. Horizon 2020 GLOBE Work Package 3 Report.
- Budnitsky, S., & Jia, L. (2018). Branding Internet sovereignty: Digital media and the Chinese–Russian cyberalliance. *European Journal of Cultural Studies*, 21(5), 594-613.
- Chisika, S. N., & Yeom, C. (2021). Enhancing sustainable development and regional integration through electrification by solar power: the case of six East African states. *Sustainability* 2021, 13, 3275.
- Coen, D., Kreienkamp, J., & Pegram, T. (2020). *Mapping global climate change governance*. Horizon 2020 GLOBE Work Package 5 Report.
- Coen, D., Kreienkamp, J., & Pegram, T. (2020). *Multilevel governance of global climate change - problems, policies, and politics: Case studies of the EU, ASEAN, and national climate laws*. Horizon 2020 GLOBE Work Package 5 Report.
- Gallagher, K. P., Gao, H., Kring, W. N., Ocampo, J. A., & Volz, U. (2021). Safety first: Expanding the global financial safety net in response to COVID-19. *Global Policy*, 12(1), 140-148.
- Grimes, W. W., & Kring, W. N. (2020). Institutionalizing financial cooperation in East Asia: AMRO and the future of the Chiang Mai initiative multilateralization. *Global Governance: A Review of Multilateralism and International Organizations*, 26(3), 428-448.
- Henning, C. R. (2006). Regional arrangements and the International Monetary Fund. *Reforming the IMF for the 21st Century*, 171-84.
- Korosteleva, E. A., & Petrova, I. (2021). From ‘the global’ to ‘the local’: the future of ‘cooperative orders’ in Central Eurasia in times of complexity. *International Politics*, 58(3), 421-443.
- MacHaffie, J. (2021). Mutual Trust without a strong collective identity? Examining the Shanghai Cooperation Organization as a nascent security community. *Asian Security*, 1-17.
- Marx, A., Otteburn, K., Hegde, V., Gao, W., Van der Loo, G., Wouters, J., Deciancio, M., Peixoto, J., Nemiña, P., Pertiwi, B., Bal, C. S., Yulyadi, L., Mursitama, T. N., & Quingmin, Z. (2020). *Mapping of the trade and development global regimes and institutions*. Horizon 2020 GLOBE Work Package 2 Report.
- Nemiña, P., & Espinosa, C. (2020). *The rise of the new official creditors in the XXI Century and the challenges to the global financial governance*. Horizon 2020 GLOBE Work Package 6 Report.
- Levi-Faur, D., & Blumsack, I. (2020). *Mapping global financial institutions*. Horizon 2020 GLOBE Work Package 6 Report.
- Lukin, A. (2021). The Russia–China entente and its future. *International Politics*, 58(3), 363-380.
- OECD. (2018). *About*. <https://www.oecd.org/strategic-foresight/about/>
- Otteburn, K., & Marx, A. (2020). *Shortcomings of the current governance and institutional models*. Horizon 2020 GLOBE Work Package 8 Report.
- Oyewo, A. S. (2021). Transition towards decarbonised power systems for sub-Saharan Africa by 2050.
- Pradhan, R., & Mohanty, S. S. (2021). Chinese grand strategies in Central Asia: the role of Shanghai Cooperation Organization and Belt and Road Initiative. *Fudan Journal of the Humanities and Social Sciences*, 14(2), 197-223.
- Ramirez, R., & Wilkinson, A. (2016). *Strategic reframing: The Oxford scenario planning approach*. Oxford University Press
- Sahasrabuddhe, U. (2008). Regionalisation processes in South and Southeast Asia: A comparative study. *Asian Scholarship*.



- Sánchez Cobaleda, A. (2020). *Case study of the European Security Architecture: NATO and OSCE*. Horizon 2020 GLOBE Work Package 4 Report.
- Sánchez Cobaleda, A., Kouliopoulos, A., Kissack, R., Bradley, M., & Badell Sánchez, D. (2020). *Mapping of global security threats and the global security architecture*. Horizon 2020 GLOBE Work Package 4 Report.
- Schilirò, D. (2020). Towards digital globalization and the covid-19 challenge.
- Shell. (n.d.-a). *Shell scenarios*. Retrieved September 24, 2021, from <https://www.shell.com/energy-and-innovation/the-energy-future/scenarios.html>
- Shell. (n.d.-b). *What are Shell scenarios?* Retrieved September 24, 2021, from <https://www.shell.com/energy-and-innovation/the-energy-future/scenarios/what-are-scenarios.html>
- Sokol, M., & Pataccini, L. (2020). Winners and losers in coronavirus times: Financialisation, financial chains and emerging economic geographies of the COVID-19 pandemic. *Tijdschrift voor economische en sociale geografie*, 111(3), 401-415.
- Tokhi, A., & Ebetürk, İ. (2020). *Cross-cutting issues in global governance*. Horizon 2020 GLOBE Work Package 7 Report.
- Wang, Y. (2020). New regionalism reshaping the future of globalization. *China Quarterly of International Strategic Studies*, 6(02), 249-265.
- Wouters, J., Kerremans, B., Peixoto Batista, J., Hegde, V., & Raina, A. (2020). *Case study on the World Trade Organization*. Horizon 2020 GLOBE Work Package 3 Report.
- Zhang, F. (2021). Rising illusion and illusion of rising: Mapping global financial governance and relocating China. *International Studies Review*, 23(1), 1-29.





## ANNEX 1 A dozen essential uncertainties as scenario building blocks

These essential uncertainties revolve around four areas or axes of uncertainty:

<b>International</b>	<ul style="list-style-type: none"> <li>▪ Intergovernmental dynamics</li> <li>▪ Superpower dynamics</li> <li>▪ Financial dynamics</li> </ul>
<b>National</b>	<ul style="list-style-type: none"> <li>▪ Economic structure</li> <li>▪ Government expansion</li> <li>▪ Domestic powers</li> </ul>
<b>Corporate</b>	<ul style="list-style-type: none"> <li>▪ Digital technology</li> <li>▪ Manufacturing technologies</li> <li>▪ Corporate landscape</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>▪ Privacy protection</li> <li>▪ Social dynamics</li> <li>▪ Climate action</li> </ul>

Each uncertainty is described through a note organized in several sections. Firstly, a description of the nature of the uncertainty and its relevance for the future. Secondly, a more detailed explanation of the different determinants of change contained in each uncertainty. Thirdly, a description of the two end points bounding a continuum of the possible—and plausible—outcomes for each uncertainty endpoint.

The fourth section covers the global governance relevance implications of each uncertainty. This section correlates with the work in the GLOBE Work Packages 3, 4, 5 and 6, as it relies on the frameworks proposed in the mapping exercises for trade and development, security, climate change, and finance, and it also draws on the relevant input from Work Packages 7 and 8.



# 1. International uncertainties

## 1.1 Intergovernmental dynamics

### *Description:*

How will have the relationships between different nation-states changed by 2030 and 2050? Are they tense and confrontational—on edge—or do they seek to build new platforms and consolidate others, for improving dialogue, cooperation, and settlement of disputes in a general atmosphere of trust?

### *Determinants of change:*

- The rise of China, the progressive withdrawal of the US from its role as global watchdog, and economic and political crises in the West, have created a perception of a more diverse global environment. This is far away from the convergence towards a liberal democratic “end of history” utopia. Questions about the ability of the international community to cooperate and engage in concerted action as well as of the future of this “diversity” will be a key factor shaping international relations through 2030.
- The paradoxes and tensions around globalization are a key issue that will shape the future of international dynamics as governments look for a balance between the search for economic efficiency and the protection of national identity and even sovereignty. Decades of globalization—guided in part by a now-questioned “Washington Consensus” and tutored by the Bretton Woods institutions—have provided clear benefits and serious concerns about the downside of globalization without limits. Consequently, there is a search for alternative arrangements and frameworks, resulting in new governance arrangements for formal IOs or less-than- global institutions and informal IOs becoming more prominent.
- These dynamics are destabilising the system built throughout the last 75 years, after World War II ended, but are not providing enough clarity on what will replace it. In the valley of transition between one governance framework and the shaping of a new one, there are possibilities for more confrontational international relations, and a progressive distancing of countries which were not allies but remained reluctant to engage more aggressively in their relations. Or, in a prolonged transition, the current governance system remains in place while crumbling at the edges, and the current international institutions fall into disuse but are not replaced—creating a fertile ground for instability.

### *Opposing end-points:*

Consequently, we envisage a continuum ranging from confrontational relationship amongst states to a more constructive engagement, with global institutions that are perceived as legitimate by all international actors put—or restored—in place. The first of these end-points is a world where relationships amongst governments move from merely bitter and tense to openly confrontational. Although wars are not common, there are multiple attempts to destabilize rivals, either through cyberattacks or other means, such as raising tariffs or



imposing sanctions at various levels. Without legitimate global institutions, there is not even the hope of holding aggressors accountable and countries retort to a more retributive foreign policy.

However, in this end-point, while global institutions progressively become a relic from another era, new regional agreements take their place. “Closer to the ground” regulation allows for more innovation, and a patchwork of alliances is crafted amongst states with closer economic, cultural, or geographical ties.

At the other end of the continuum, there are fluid relationships amongst states. In order to establish a new basis for cooperation, there is an attempt to create new institutions, or reform those of old, to empower them and make them legitimate in the eyes of all participants of the international sphere. With their support and capabilities increased, these organizations set principles and norms regarding trade, AI, and climate change, contributing to an atmosphere of stability and trust in which different interests are attempted to be balanced transparently.

#### *Global governance implications:*

This uncertainty affects institutional choices for the resolution of cooperation dilemmas. Both ends of the continuum present challenges for global governance, incentivising different processes which can alter the architecture of the current system.

On the one hand, a more confrontational relationship, as argued before, leads to a progressive weakening of the role of intergovernmental institutions, which have even been delegitimized given their inability to contain these trends. Although regional organizations fill the vacuum to a certain extent, more ad hoc, informal intergovernmental organizations proliferate, as they allow for faster answers to the changes in the international environment. Clusters of states with common rivals or interests develop their relationships through less institutional channels, although, paradoxically, this can serve as the foundation of future institutions (WP 8.1).

On the other, fluid relationships lead to reforms of institutions, but they can also mean the end of traditional international organizations if participants feel that a reform is not enough. A more cooperative approach, trying to balance the interests of all-states, can result in sweeping changes that inaugurate new institutions with rules that define the new equilibrium of power, instead of merely amending previous norms. Similarly, clusters of countries with similar interests can also develop informal alliances in this end-point (WP 7.1), maintaining the legitimacy of the new/reformed global institutions but also reducing their scope.

For issues such as climate change, confrontational relationships could create bigger difficulties for solving the challenges of collective action or avoiding the perils of distributed conflict (WP 5.1), particularly if reducing emissions, which provides long-term global benefits, comes at the expense of local economic setbacks in the short-term. Similarly, it could also create problems in the security realm, as more cyberattacks sponsored by states, as well as less control over WMD reduces the stability of the international system (WP 3.1). Both issues are interlocked, as less focus on climate action may also increase the number of people displaced by climate change, further tensioning politics in certain countries and contributing to a slippery slope of threats and tense relations.



In general, we understand that more cooperative dynamics are positive across all issues, enhancing global trade, increasing collaboration in security matters, and giving political stability to markets. A confrontational perspective would probably reduce the appetite for multilateral trade agreements, giving the array of vetoes that could arise in any meeting. Agreements such as the RCEP, the Transatlantic Trade and Investment Partnership (TTIP) and global commitments for action against climate change would be weakened. Consequently, solutions to common problems would gravitate more towards the hands of states and bilateral alliances, reducing the effectiveness of these measures, given their lack of “globalness” (WP 5.1)

## 1.2 Super-power dynamics

### *Description:*

This uncertainty is concerned with the evolution of the relative strength of the main power blocs, as well as the relationships among them. Are we at the end of a unipolar era? And if so, what will be the next stage? A bi-polar era; a multi-polar one; or a more fluid nexus of relationships?

### *Determinants of change:*

- After the end of the Cold War, and of the USA-USSR rivalry, there was a generalized perception of the position of the United States as a global hegemon, main superpower, and “police” of a liberal world order. However, that predominance—and even commitment—has been put into question in the last decade.
- The forceful rise of China, the broader shift of the economic centre of gravity towards Asia, the re-assertiveness of Russia, and the presence of a powerful regulatory power in the EU have created the conditions for a tripolar, or even quadripolar, race. There is no longer a single superpower in town. The US has been drifting away from traditional allies, such as the European Union, and from its former commitment to multilateralism, as well as to global institutions or previous arrangements with allies (such as NATO)—but is this reflecting a passing mood or a more fundamental change? On the other hand, China’s apparently inconsistent political and economic models and its growing global ambition (One Road/One Belt, etc.) seems to have caught much of the Western world by surprise and its sustainability is not obvious. Finally, the EU struggles to find consensus to deepen its integration, and acts a sort of regulatory power, with a changing relationship with the US and tense dealings with China, which is increasing its presence in its eastern countries and borders.
- At the same time, the US has withdrawn from certain commitments on the international sphere, especially (but not only) during President Trump’s administration. A more detached stance of the former global watchdog, combined with an increase in the relative strength of the main rival, in the context of more integrated markets and the spread of digital technologies, have increased the range of tools deployed by superpowers and made the use of soft power even more important than before. Although there are still a lot of military conflicts, many disputes take place in areas such as regulations, taxes,

sanctions, and foreign investments. Initiatives such as the Chinese Belt & Road Initiative (BRI) or the push of the EU to set global rules are a testimony to this.

- The combination of these factors poses important questions for the future of the international system. The rise of one power, along with the decline of another, creates the conditions for increasing the risk of a confrontation that transcends the verbal domain. With the development of new technologies, as well as a growing interdependence between countries, we might see a weaponization of the latter (Farrell and Newman, 2019), and weaker states being trapped in a network of threats and precarious alliances within the sphere of influence of one of the power blocs.
- Is a more multipolar world, with multiple decision-making centres, no clear all-encompassing ideology, or even a common framework of legitimization of interventions and actions, taking shape? Or is this just a transition phase? Economic interdependence has not developed on par with stronger diplomatic and political ties amongst power blocs, and thus the possibility of an overlapping consensus has become more and more remote.

#### *Opposing end-points:*

Envisioning the resolution of the key elements of the uncertainty as a continuum results in two possible end-points: a “split world” and a “nexus”. The former is that of bipolarity, with a confrontational relationship. Here, all other countries would stand between revamped spheres of influence, with very few finding space to stand aside as non-aligned. Supply chains would be changed with both blocs trying to keep their production and resources closer to home and reduce as much contact as possible with their rival, except for confrontational actions. Trade wars or proxy conflicts could see their numbers increased in this end-point and international agreements become very elusive—no matter their potential value.

In the “nexus” end-point, there is a multipolar world, where no superpower has dominance. This fluid balance of powers creates an environment more propitious to international agreements, although not all of them with ‘win-win’ potential. It also helps in consolidating new governing principles and common sets of norms for international organizations, creating a web of relationships in a more multidimensional setting. This trend continues, and the world sees multilateral agreements as the way forward.

#### *Global governance implications:*

The continuum represents different sets of rational institutional choices that can emerge—especially for major countries other than the superpowers. A “split” world would present a challenge both for global and regional international organizations. Let us take the example of ASEAN, which recently approved the Regional Comprehensive Economic Partnership (RCEP), strengthening the commercial ties amongst its members and other five (China, Australia, New Zealand, Japan and South Korea). This is an example of a multilateral approach aiming to foster free trade in the region. However, the growth of a superpower like China could render the organization useless, co-opted to serve as a puppet for “vassalizing” certain states through this system. Something similar could be the case of the NATO, which



would reinforce its role as a defensive alliance, but also a reassertion of the dominance of the superpower in the European continent.

This end-point would also present a challenge for organizations that are poorly defined by traditional categories, such as the EU, which would face the tough decision between retrenchment towards the normal boundaries of an IO or deepening its integration and political capabilities (WP 7.1). It would be doubtful, however, that even with its “Brussels’ effect” (Bradford, 2020) and regulatory capabilities, it could stand against the might of the other two powers. Global organizations, on the other hand, would probably lose authority and legitimacy, given that the superpowers would mistrust multilateral approaches to conflict resolution (WP 8.1).

An example of this would be the WTO, already contested not only by countries from outside the Global North, but also by the US, as the dispute over the Appellate Body has made clear. A split world would result in an even further lack of hierarchy (WP 4.1) amongst trade-regulation organizations (Keohane and Victor, 2011), or any other attempt at crafting global rules. Deals such as Paris 2015 would be off the table, turned into a patchwork of bilateral or regional alliances to combat climate change or tackle financial regulations (WPs 5.1 and 6.1).

At the same time, these patchworks could become the seeds of new structures and platforms at bilateral or regional levels. New institutions could take the mantle of those crumbling, but agreeing on starting with a limited scope, both geographically and politically, and avoiding more encompassing multilateral deals. At the same time, they could face difficulties in drifting away from the sphere of influence of the great superpowers and develop autonomously.

A “nexus” world would, however, empower these organizations, enhancing the role of the WTO, the IMF or even the United Nations, re-legitimized across the world. It could also allow for the flourishing of regional alliances and partnerships, as well as multilateral deals. However, it could also mean a process of complete renovation of institutions, with new ones taking their place, as old structures are perceived as inadequate for an era with no true global hegemon. As a trade-off, the internal authority of regional organizations could be boosted, while their authority in the international sphere could be reduced, given the proliferation of similar organizations across the world and a possible overlap in functions or even areas of influence (WP 8.1).

### **1.3 Financial dynamics**

#### *Description:*

How will financial markets evolve throughout the decade? Will they remain stable, with incumbent players remaining largely dominant, global institutions in place, and low interest rates? Or will fintech developments, crypto-currencies, inflation, and exogenous crises result in greater disruption and instability?





### *Determinants of change:*

The Great Recession of 2008 created deep mistrust against financial markets, as well as a sense of the dangers of instability in this realm. Similarly, and despite different causes, the pandemic crisis of 2020 has had a significant impact on financial markets—notably increasing the volatility of securities markets. However, this exogenous impact could be seen as mainly increasing the level of uncertainty around financial dynamics. This uncertainty can be explored through four fronts.

- First, on the global regulatory front we could see agreements such as Basel III consolidated, alongside cooperation among national financial regulators, or side-tracked—reflecting divergent views on regulation and financial controls. Similarly, could international institutions like the IMF and BIS become stronger and well-supported? Or could there be little global coordination and a greater role for regional institutions (in the EU, Asia, etc.)?
- Second, will ample liquidity and low interest rates continue? Or will the large monetary interventions and sovereign debt issuance around the world result in a burst of inflation and spike in interest rates? Intermediation dynamics are also worth keeping in sight. On one hand, there is the role of financial hubs—will existing ones consolidate and result in the gap between the major ones (New York, London, Tokyo) and alternative ones growing? Or will there be a dispersion with budding financial hubs (Singapore, Dubai, ...) becoming bigger and new ones emerging?
- Third, fintech and the convergence of eCommerce and finance could rapidly alter the structure of the market and even challenge current regulatory boundaries. Use of big-data, adoption of new AI-based solutions, and flexible approaches could break the dominance of established actors, opening the doors to more competition. Predominant digital platform corporations could use their financial muscle, consumer reach and technological prowess to present powerful alternatives to traditional banks, insurance companies, and other financial incumbents.
- Fourth, is the world of currencies going to remain largely unchanged? Or will digital currencies, cryptocurrencies, and a different approach to reserve management and international payment mechanisms upset the role of exchange rates?

### *Opposing end-points:*

Two possible end-point outcomes serve to characterise this uncertainty. One of them is that the period through 2030 has been characterized by disruption along the four fronts: global financial institutions lose support and the capability to prevent and intervene in crises; a jump in interest rates and a disaggregation of financial hubs; a major share of financial services being provided by firms that were originally not financial; and the spread of cryptocurrencies. On the other end-point, we can envision a stable environment including steady financial dynamics: Basel-type regulatory frameworks become consolidated for banks and expand to other financial institutions while the IMF is given enough firepower to face crises; interest rates remain subdued; incumbent financial institutions retain major shares of financial services



(including through fintech acquisitions and regulatory protection); and cryptocurrencies remain a fanciful notion with limited niche reality.

*Global governance implications:*

Disruptive financial dynamics, as it has been stated before, could have an impact in global institutions such as the IMF. With an unpredictable scenario, can these institutions really take decisions to prevent or tame financial crises? Or will their legitimacy erode at the same time as they prove inefficient in the mission that they are supposed to fulfil? (WP 7.1)

Both citizens and states could find that these institutions are not useful for them and aim for their reform. This reform could include changes not only in their decision-making procedures, but also in bureaucratic processes, perhaps streamlining them to make them more efficient, or in the very principles that they uphold (WP 8.1). This could be the case even in the face of more steady financial markets. Reformed financial institutions (perhaps to increase their scope) aligned with more multilateral treaties and agreements amongst similar minded nations could reduce uncertainty and enhance stability (WP 6.1). There is also a trade-off here, because even if states find these multilateral arrangements effectively useful to preserve stability, they can consider that, at the same time, they will harm innovation (WP 6.1). Is it possible to strike a balance between the two?

It must also be noted that greater disruption could result in challenges for climate change and security. On the one hand, the emergence of new financial actors could result in more investment in decarbonising technologies, helping to catalyse green transformations, and contributing to policies of adaptation and mitigation (WP 6.1). On the other, the opposite could be true, with carbon-intensive production taking the focus, especially in times of instability and with the desire of states and citizens to cling to what they know works. Something similar happens with security: more instability in the financial realm can lead to more erratic behaviour by political leaders (WP 3.1), looking for scapegoats to the problems ailing their countries, or rogue groups, aiming to profit from the situation.

## **2. National uncertainties**

### **2.1 Economic structure**

*Description:*

This essential uncertainty is concerned with the role of the state in the economic life of countries. Will recent events result by 2030 in the state taking greater stakes in economic assets and a more assertive role in markets and transactions or will they represent a temporary phenomenon with a retreat starting by the mid-2020s?

Determinants of change:

- Throughout the last 40 years, across the West, there has been a certain idea of private enterprises being more efficient than public ones. Similarly, the role of the state was also more confined to being a “watchdog”, ensuring that globalization continued swiftly. This

was not the case in other regions, though. State capitalism, with more interventionism from the state, and a powerful public sector or public-backed private investments, was heralded in many places of the globe (Bremmer, 2009). Further, given recent financial crises and events such as the COVID-19 pandemic, policy steps have been taken in many countries tantamount to an increased role of the state, as well as a rethinking of globalization. At the same time, economic protectionism, seemingly almost abandoned by the beginning of the century, has returned in recent years, and not only amongst “state capitalists”.

- Recent crises and natural catastrophes have put the spotlight on strategic vulnerabilities and a lack of resilience that had resulted from the search for efficiency via highly fragmented global supply chains. Slogans such as “America first” or “Made in China” are manifestations of this—combined with actions such as the retreat from multilateral treaties, perceived as “harmful” for the country and its workers, or increases in tariffs for imports.
- In fact, data from the WTO (WTO, 2020) shows that in the last 12 years, members of the organization have introduced almost 2000 trade-restrictive measures. These numbers rose especially in the period 2018-2019, which was the year with the historically highest level of trade-restrictive measures. Countries such as the US, formerly champions of the free trade-based world order, have been amongst the harbingers of this changing dynamic. A contributing factor has been the perceived stagnation of the economic situation of Western middle classes in the last decades, while middle classes in developing countries have continued their economic growth (Milanovic, 2013). Globalization and free markets are no longer seen as the most direct way forward towards wealth.
- In this context, there has been a tendency towards strengthening potential national champions, protected, or even sponsored by the state, not only to improve current capabilities but also to compete in the possible tech and trade races to come. Fears of hostile take-overs or of businesses with foreign capital that would not be aligned with national interests in the event of a political, economic, or military conflict, have reinforced the notion of “strategic control” of key assets of the economy. The implications of this uncertainty are, thus, far-reaching and set to spark meaningful changes, as it affects the very essence of the political economy of nation-states.

#### *Opposing end-points:*

We identify two possible avenues towards which this uncertainty could develop. On the one hand, a rise of economic nationalism and protectionism, not only confined to certain nations, but extended throughout the globe. On the other, an updating of the rules of competition, a renewed faith in free markets, and a series of regulations to put in place fairer norms in access to certain markets.

The end-point of nationalism presents a world where states have taken the decision to expand their role in the economy to an unimaginable extent in the latest decades. Via the re-acquisition of key businesses in strategic sectors, or limitations to Foreign Direct Investment, states would seek to limit the chances of external actors damaging their economy. Similarly, they would try



to create local supply chains, hoping to answer faster and better against new threats, such as another pandemic, an economic crisis or even a war. At the same time, through the promotion of national champions, countries would try to break those very same barriers to foreign investment in other countries.

On the opposite end-point, a world focused on interstate competition is one where countries have reached an agreement about the problems of the dominant model in the last years, while at the same time stayed away from the lure of protectionism. By providing new sets of rules for fair competition, avoiding abuses of power, and fighting against excessive concentration of business, they try to generate a level-playing field for actors, as well as to ensure the efficiency of free markets. This end-point sees a renewed faith in the workings of the current system, although with new regulations to face the new challenges of the century.

#### *Global governance implications:*

A more nationalist outlook of the economy, international relations, and institutions would pose problems for the perceived legitimacy of many IOs (WP 8.1), but, especially, for the WTO. If countries in the West, traditionally associated with the defence of free trade, lowering barriers to foreign investment and multilateral deals, consider that they are better off with bigger states and more protectionism, can the WTO survive?

This not only applies to this organization. In an opposite direction, there could be correlation between more “nationalist outlooks” and regional alliances, although perhaps reduced regarding experiments such as the EU or ASEAN (WP 7.1). Globalization and free trade could be perceived as good for developing countries but bad for advanced economies, in a vision of “zero-sum games” that gives legitimacy exclusively to free trade amongst nations in a similar economic stage. Not only that, but economic nationalism could pull political preferences towards more nativist and populist discourses (Mudde, 2013), weakening any non-commercial alliance and reviving more jingoistic approaches to International Relations. Rodrik’s trilemma (globalization vs. sovereignty vs. democracy) could be resolved in favour of nation-states with less globalization, but also with weakened democracies (Rodrik, 2011).

An interesting contrast could come from developing countries, which could see free trade as actually positive for their economies. Globalization has lifted middle classes from developing countries (Milanovic, 2013), but its appeal to the “losers of globalization” in the West has been reduced. The same cannot be said for members of those benefited countries, which could become active supporters of the WTO or other institutions promoting free trade and multilateral agreements (WP 3.1). Could this end-point lead to a complete reshuffle on pre-conceptions of who supports globalization and multilateralism?

On the other hand, a world more focused on competition and levelling the playing field would not present such end-point changes. It would require amendments in some key institutions, such as the IMF or the WTO, to change decision-making procedures and policy decisions that could be perceived as not legitimate by some countries (WP 8.1). Similarly, it is plausible that with states less willing to retrench into national borders, the authority of these institutions would rise. Despite not being the sweeping changes heralded in the other end-point, it would also

pose a challenge to reformers. The success of these institutions would depend on the steps taken throughout this critical juncture.

## 2.2 Government expansion

### *Description:*

Have recent crises, which gave states expanded intervention powers and expenditure margins, led to a permanent increase of their political and fiscal powers? Or have concerns about the size of government, its intrusions in the private sphere, and the deficit levels resulted in a retrenchment of its capabilities?

### *Determinants of change:*

- Both the financial crisis of 2008 and the COVID-19 pandemic of 2020 brought back demands for more government intervention and spending. By effectively bailing out key pieces of the economic system in one crisis or intervening to avoid lay-offs in the later, authorities in the West recovered powers that seemed lost to the state not so long ago. Similarly, both in democratic and authoritarian countries, the pandemic, as well as the rise of social media, has given way to the possibility of greater interventions of governments in the private sphere of citizens. Citizens across the world might welcome these developments, as a way to create shields against future economic crises of “hate speech” in the public sphere. Conversely, this increased role of the government can spark fears among those worried about possible invasions of the private sphere (Berlin, 1969), or sub-national governments, afraid of being deprived of any real power. Governments, as it stands now, have deployed in the last year a level of activity that was almost unprecedented in the last 40 years across the globe.
- By getting involved on key areas of the economy, investing vast amounts of money in protecting citizens from the virus and the economic impact of the measures to contain it, and setting unprecedented restrictions in daily life, the scope of governments’ powers has been increased throughout the crisis (Balz, 2020). This has re-ignited the debate between proposals for less activity of the state, in order to allow for freer markets, and stances in favour of an expansion of state powers to draw the reins of the economy. These two perspectives also clash alongside a series of cleavages, such as the powers vested in national and subnational governments or the checks-and-balances in place to control the action of the state when interacting with citizens.
- Arguably, it was not only COVID-19 and the financial crisis of 2008 what propelled the expansion of state powers, but there were several other dynamics at play. Firstly, the progressive aging of the population, especially in the West, resulting in increasing dependency ratios and the need for more social spending (Hemerijck, 2018).
- Secondly, the rise in inequality (Atkinson, 2015), and a growing anger resulting from the perception of Western middle classes being in the losing end of all of the latest economic and political processes (Milanovic, 2013). This has set the stage in many countries for the state to demand more resources, in the form of taxes, to address these problems.

- Thirdly, developing countries need to reinforce their capabilities, which leads them to look for more resources, and in the absence of growth through other sources (such as foreign investment), this expansion could be seen as a potential silver lining for the growth of their administrative capabilities.
- Countries around the world, no matter their political system, have also been forced to reinforce their roles as protectors of their citizens, and not mere vigilantes of the economy. This increase in the powers of the state has been demanded by citizens in the last year, to control the pandemic. Studies have shown that the expansion of government is easier than taking back the powers that have been vested on it (Pierson, 1996). However, in the case of mishandling of the crisis, as well as of the urgency powers given to governments, there could be pressure for reducing the size of the state and shifting the roles of different levels of government back to 2019 levels, or even further.
- Corruption can be another factor. Research has shown that in times of crisis, especially when lives are at risk, the threshold of toleration with corruption is reduced for citizens (Crabtree et al. 2020). Corruption involving money that should be destined to heal the wounds of the crisis could prove fatal for the prospects of keeping the expanded powers in place. Mobilized civil society can demand “sunset clauses” of termination of the exceptional powers of governments, if they were not already in place, ensuring, if not retrenchment, at least the continuation of the “status quo”. Finally, it must be noted that the increase in public debt that the pandemic emergency has required could also prove a strong force for a retreat to small government.

#### *Opposing end-points:*

We envision two end-points for the resolution of this uncertainty. On the one hand, a sustained expansion of governments, maintaining the powers vested on them throughout the crisis and even increasing them. An effective handling of the pandemic, as well as of future challenges, coupled with the state capabilities to effectively deal with them, could provoke a strong current of public opinion in favour of sustaining the measures. Greater support for protection “from cradle to grave” would emerge, with governments taking a bigger role in the life of citizens, including intrusions in the private sphere, which could be perceived as legitimate insofar as they contribute to a higher level of security in all aspects.

On the other, a retrenchment of the powers of the government, and a strong current of opinion, including because of fiscal discipline or reluctance by citizens and businesses to accept more taxes, in favour of keeping them in check. Mishandling of emergency powers, power struggles between different government levels, corruption in economic policies, lack of state capability to protect citizens or warnings about the loss of privacy of citizens against more vigilant states. Many factors can contribute to shows of dissatisfaction with powers that were a temporary measure for an exceptional situation to be maintained.

#### *Global governance implications:*

The expansionist push of states in the wake of the COVID-19 crisis represents a clear-cut change regarding the dominant way of thinking in previous decades. Although a restoration of

the economic thinking in the post-Breton Woods years seems implausible, the expansion of the powers of states, especially in liberal democracies, is a novelty. We know that processes of retrenchment (Pierson, 1994) are slower than those of expansion, but how much can states expand and what are the consequences for global governance?

An end-point where there is a permanent growth of state powers could have several unexpected effects: the first, easier to predict, is greater protectionism, as explained in other uncertainties, and, consequently, a weakening of the authority and legitimacy of the WTO, as well as other regional organizations that promote free trade (WP 3.1). Confidence in the power of state-led economies reduces faith in global markets and the win-win results of these deals.

A more unexpected outcome could be a weakening of democratic norms, even in those nations that are seen as “consolidated democracies.”. The acceptance of expanded powers can reduce the extent of the private sphere of citizens or destroy checks-and-balances. This, in turn, could destroy mechanisms such as the “Rule of Law” in the EU, or reduce the authority of organizations aiming to promote democracy around the world. Normative IOs could then be eliminated or reformed to have reduced powers (WP 8.1). However, this could also empower IOs and other types of global actors whose goals are less normative, and more focused on goals such as trade. The increased power of the state, alongside the reduction of democratic “constraints” could lead to a new form of globalization.

On the other end-point, further retrenchment of states could empower organizations centred in free trade and expanding free markets around the world. IOs such as the IMF could see their legitimacy increased, especially if their proposals for growth after crises are successful, while the EU, for instance, could stall its advances in terms of political integration to complete market integrations across different domains (WP 7.1). On the other hand, less powers vested on the states could empower civic organizations that contest the traditional structures of power, as well as IOs that aim to craft transnational governments. This would not be contradictory with the former, with government structures centred around sub-national polities and citizens’ associations, interwoven in a network of IOs supporting transnational government and freer markets.

There are also other trade-offs present here. For instance: a growing presence of the state in economies and the lives of citizens could help in pushing forward a reformulation of the “security” term towards a more “positive” (WP 4.1) stance. “Freedom from want”, and not merely from fear, could become a reality, as well as bigger investments in R&D and, consequently, progress in areas such as adaptive processes in the fight against climate change (WP 5.1). However, this expanded role of the state can also lead citizens to “fear” the actions of the government, demanding more “negative security” and a possible restriction of the powers vested on the state.

## 2.3 Domestic powers

### *Description:*

Has the impact of different exogenous crises affected the perception of the legitimacy and utility of traditionally centralized nation-states? Has poor management and demands for





administrations that are closer to the citizens tilted the balance in favour of more decentralization? Have cities strengthened their position in the international sphere as a result of these dynamics and are posed to have a stronger international role by 2030?

*Determinants of change:*

- Classic diplomacy has been centred around the pre-eminence of nation-states. The Westphalian model, present since 1648, has given them the central role in handling politics, economies, and relationships with other actors. Processes of decentralization, either by bringing together formerly separate states, or “holding together” unions that required federalization (Stepan, 2005), had not disputed this pre-eminency.
- However, in the wake of globalization, big cities have risen to prominence. It is obvious that they have been actors of their own for the most part of history. As hotspots of innovation, connecting citizens from different backgrounds and acting as agglomerates of businesses and talents, they were a linchpin of the progress of countries, as well as a source of rights and freedoms for citizens. In the last decades, through a dual process of globalization (Sassen, 2013) and both population and economic growth, big metropolis have become more important than ever. They have been harbingers of processes of even more concentration of population and have gained a certain amount of relevance in international talks. For instance, Chicago and Mexico City struck a trade agreement in 2013, without considering the desires or global strategies of their federal states. Similarly, mayors of cities such as Los Angeles, Paris or Barcelona have gathered to continue reinforcing their commitments to fight against climate change. And, throughout the crisis of COVID-19, mayors were often seen as the first line of defence against the expansion of the virus, acting as protectors of their citizens and a point of contact with civil society and providers of resources.
- This, in turn, could lead to a change in the perception that citizens have of the state. While still the legitimate entity that controls a territory through the use of power (Weber, 2008), their handling of recent crises, compared to that of mayors of the most relevant cities in that territory, can have an impact on the perpetuation of that legitimacy. With cities rising as global actors of their own, and possible future crises eroding even more the perceptions of competent management by the state, the parameters of political interaction both within and across borders could change significantly. With cities becoming the sources of social integration, and providing stronger bonds of shared identities, they could dispute citizens’ allegiances with states (Sassen, 2013).
- However, it must be noted that these actions by cities in the international sphere are still sparse. For the most part, city administrations solve day-to-day problems and lack the resources to combat bigger scale threats, such as pandemics, relying instead in their communicative power to demand more from the state. Declarations, joint statements, and media presence during crises do not amount to political power. Cities are still not sitting in the main circles of power, for instance, representation in international organizations. Communicative power is important, but political power is more. Without “devolution” processes of competences from the state, the former could not turn into the later.



### *Opposing end-points:*

We identify a continuum of possible outcomes, with a more centralized power on one end-point and dispersed nodes of power, usually placed in great metropolises, on the other. The former presents an evolution where the states can effectively handle present and future crises, gaining the trust of citizens to maintain their status. At the same time, failures in processes of decentralization, either by mishandlings of relevant issues or by incorrect attributions of competences, provoke a recovery of certain functions by strong central states, re-stating their pre-eminence and crafting a new Westphalian world. Despite the strong media presence of some mayors, and the economic power that cities still hold, nation-states remain as the source of political power and allegiance of citizens.

On the other end-point we find that the trust of citizens has been placed in the administrations which are closer to them. Given claims for administrations which are “closer” to the citizens and knowledgeable about day-to-day problems, greater legitimacy is bestowed upon cities, which become stronger vis-à-vis the state. In this outcome, more competences are given to mayors, becoming much more than intermediaries, and taking the responsibility to generate, tax and allocate resources, transforming big cities into a new form of “Polis”. Social capital and networks of civil society play an important role in this change, aiming for more direct-democracy and grassroots connections to governments. While regions also gain from these “devolution” of political and administrative competences, cities are the major beneficiaries of their stronger connection to citizens.

### *Global governance implications:*

We must distinguish between two types of domestic powers in this uncertainty. First, subnational authorities such as regions or federated states. Second, cities, and especially big metropolises. Although the growing power of any of them would present challenges to current global governance, the extent of these changes will be determined by which of these powers end up gaining the upper hand in the case of a more dispersed distribution of power (WP 8.1).

The rising power of these sub-national regions could, on the one hand, reduce secessionist tendencies in certain states. If entities such as federated states have a bigger saying in IOs and increase their measures of self-rule (Hooghe, Marks and Schakel, 2010), they could see this new agreement as a consensus between complete independency and more centralising pushes. On the other hand, there are studies that show that these decentralization measures can reduce the desire for secession in the short term but increase its viability in the long term (Brancati, 2006), which would pose questions for membership in IOs. Most of them consider states as the main unit of representation, and do not vouch for their divisibility in new entities. Incorporating sub-national regions could increase their legitimacy in regions with national tensions, but, at the same time, reduce it at the state-level, decreasing their legitimacy in the eyes of members.

If cities are the ones to take the main stage in international politics, it would mean an even bigger reshuffling of traditional preconceptions of IOs (WP 7.1). Cities would move from vessels of communicative power to actors on their own right, with possible representation in boards of government. The impact of this incorporation in IOs could result in changes in its

governance (for instance, through a more “direct democracy” approach) and the goals of these institutions. It can even foster the creation of new institutions such as “networks of cities” that can dispute the legitimacy of states (WP 8.1). The Westphalian paradigm, and even traditional conceptions of multilateralism, would be contested.

Take, for instance, processes of adaptation to the effects of climate change (WP 5.1). Climate change vulnerability is usually locally perceived (Ayers, 2010), so cities could be on the forefront of proposals in this regard. With an increased role in international affairs, they could turn the problem from local to global. Similarly, the migration issue, connected or not to climate change, could become more relevant.

Of course, a devolution of powers to central states and the waning of the influence of sub-national entities in IOs would not mean necessarily a return to the status quo. More empowered states, without having to cede competences to regions or cities, and keeping the spotlight in international relations, can result in more jingoistic approaches (WP 4.1). Or in pushing aside the specific needs and requests of regions in IOs.

### **3. Corporate uncertainties**

#### **3.1 Digital technology**

##### *Description:*

Are technologies, such as Artificial Intelligence (AI), machine learning or augmented reality/virtual reality (AR/VR), on the way to become central in a myriad of relationships? For instance, how will innovation and adoption of technologies affect relations between businesses (b2b), from businesses to clients (b2c), from customers to customers (c2c) or from government to citizens (G2Z)? Are they changing, and will continue to do so, the consumer experience, supply relationships and the labour market? Or are they stalling, amongst fears of cyberattacks, technology fatigue, and luddism?

##### *Determinants of change:*

- Behind the use of technology at any given point in time there are two factors: innovation-based on new developments, usually by scientific teams and driven by experimentation; and adoption of existing technological possibilities in workplaces, supply chains, consumer experience and other areas of business. In the medium term, the narrowing of this gap between availability and adoption of technology can have the greatest impact. Given the surge of new technology development in recent years, it is how this availability-adoption gap evolves over the next decade that will determine the role that technology plays by 2030.
- AI exemplifies this uncertainty: with many studies pointing to its disruptive—and productive—potential; and a long track record of disappointment and delayed adoption. A major question mark is about scalability. For large corporations it is easier to invest

resources in implementing AI across different parts of the value chain, and in almost all sectors. However, for SMEs, that same process can be costly, resulting in “divesting” resources instead of “investing it”. A recent survey by IBM showed that while almost 50% of large companies in the world were already adopting AI, only around 30% of SMEs were doing the same (IBM, 2020).

- In addition, AI and other digital technologies conjure up “danger” and “mystery” in the minds of most of the citizens—which could act as a demand—an even regulatory—hurdle to their adoption. Words such as those of Elon Musk, regarding the dangers of AI, or Vladimir Putin (“whoever controls AI will control the world”) can only serve to increase the fears of a future where “broad AIs” can control every aspect of human life.
- Because there may well be a major “first mover” advantage in the development and adoption of new technologies (Macron, 2018), they can play an asymmetrical role reshaping markets and competitive positions, both within and amongst sectors. Once a corporation or state can become the leader in technological terms their advantage could become the source of quasi-monopoly power.

#### *Opposing end-points:*

Following these dynamics, we have identified two possible outcomes or end-points that characterise the uncertainty continuum. First, a world where digital technologies are embraced by businesses, governments, and citizens, enhancing their confidence in the possibilities of AI and other new technologies. By providing an adequate institutional context for innovation and adoption of AI in SMEs, as well as adding digital skills to educational curricula, governments ensure that citizens can understand what its advantages are. This, along with more coordinated action in favour of transparency in AI, helps in promoting more adoption of digital technologies by businesses for their relationships with other businesses and clients. In time, even citizens adopt these new technologies as platforms for their relationships with governments and other citizens, facilitating the organization of grassroots movements.

On the other hand, we envision a world where the population shuns away from digital technologies, in a sort of new Luddism. This is provoked not only by fear, but also because of perverse experiences with the “black box” decision processes of machines, as well as the threats to human jobs. Similarly, the rise of deep fakes, cyberfraud, and leaks of personal data have eroded progressively the faith of most of humankind in the more utopian views of technological development. Amongst those which continue investing heavily in R&D and implementation, problems of scalability widen the gap between large companies and SMEs, increasing inequality both within and across nations. Consequently, the development of new technologies is slowed down due to the lack of enough productivity gains from new digital technologies, as its adoption is exclusive of very few concentrated big actors. Given this, corporations and states end up treating these technologies mainly defensively while looking for other ways to gain a competitive edge over rivals.

#### *Global governance implications:*

Global governance institutions would be affected in two ways. First, internally, as there could be changes at the bureaucratic level, adopting AI technologies to speed up certain processes,

either by replacing some workers or by complementing their jobs. Bureaucratic reform could lead to faster implementation of decisions of IOs (WP 8.1).

Secondly, in terms of the level of development of “cyber-democracy”. Although currently it is still not safe, the possibilities of more participation by common citizens or grassroots organizations could change their representativity in IOs, more willing to embark in processes of consultation with their citizens. This could be easier in IOs that are less “technical”, which, at the same time, are those which see their authority as more contested (WP 7.1). By including these processes of democratic participation, they could boost their authority and legitimacy.

We should also look at the security angle of global governance and how each of the end-points correlates with it. In the case of a “shunned” population, where digital technologies have not been adopted by most states and businesses, we find that there is a decisive advantage for those who have adopted these technologies (WP 4.1). Cyber-attacks, both by rogue groups and by powerful states (who have developed these digital capabilities), could be more impactful if the targets are not prepared to repel them. Inequality could also rise, increasing the dangers of populist movements taking power (Mudde and Rovira, 2012).

Advances in modern warfare should also be considered, in both of the end-points, with possible big differences between countries. Not only in terms of cyber-attacks, but other technologies of war (Kalyvas, 2019), such as the use of drones or unmanned vehicles. These technological progresses would probably go faster than the ability of FIGOs to define and regulate them (WP 4.1), fostering informal clusters amongst states or even dangerous grey areas of action, where states less committed to the stability of the international system, or the aforementioned rogue groups, could act with more impunity (WP 4.1).

### **3.2 Manufacturing technologies**

#### *Description:*

By 2030, has manufacturing technology remained largely unchanged—with significant change confined to a small number of sub-sectors and places? Or have automation technologies such as robotics, and applications of AI and the Internet of Things resulted in sweeping changes, including in sectors that seemed less prone to it? How much, and how fast smart manufacturing spreads will have major implications for the composition of labour markets, rises in productivity, and for the kinds of skills in demand.

#### *Determinants of change:*

- In 2015, China launched its “Made in China 2025” project. This was part of an ambitious plan to turn China into the most advanced and innovative economy in the world, signalling a decision to invest heavily in technologies with the potential to turn what was considered as an activity relying on blue-collar workers (and searching for advantage in low wages) into a new source of competitiveness.



- Let us take robots, for instance. According to a study of the MIT, more than 2 million robots already work across factories in the world. The potential for this and other aspects of “smart” manufacturing is enormous given that the relevant technologies are largely available already. The incorporation of machines which can take on the most tedious and repetitive jobs can free up time for other workers to focus on more complex tasks, while the feeding of data to AI and expansion of the development of the internet of things could lead to interconnected factories, with a constant flow of data and alerts regarding the status of machines, possible bottlenecks in the productive process and in supply chains or potential harm to human workers (Frey and Osborne, 2017; Wolters, 2020).
- However, there are counterparts to this trend. The hurdles to adoption of “smart” manufacturing technologies and IoT that have been in place for some time—accounting for disappointments and even a dismal failure of some past predictions—could well prove persistent. In addition, 75% of those 2 million robots are concentrated in 5 economies (China, Japan, South Korea, the US, and Germany) and almost specifically in the automotive sector. This concentration can widen the gap with other states, increasing global inequality and with the possibility of the formation of international alliances to avoid diffusion effects of technology.

#### *Opposing end-points:*

In the light of these dynamics, we envision two end-points in the continuum of possibilities for how this uncertainty could be resolved by 2030. At one end of the continuum, we envisage these technologies spreading slowly and mostly through niches: some corporations, countries and subsectors which largely remain the exception and very gradually only extending beyond that. The hurdles of relative cost (especially for SMEs), complexity and reliability are augmented by regulatory actions reflecting voter and union pressure to block the replacement of human labour by machines. Overall suspicion of IoT in both personal lives and factories has increased and also blocked much progress in that regard—including through concern of IoT serving as a possible Trojan horse or black box that increases the power of a small number of white-collar workers against the larger numbers who work manually. Smart manufacturing remains something closer to science fiction than everyday reality.

At the other end of continuum of possible outcomes by 2030, there is a situation in which these technologies have spread widely and played a transformative role, making their sectors more efficient and productive and, either imitated by other sectors across states or providing huge competitive advantage to those who have led the adoption of smart manufacturing. As adoption of robotics spreads, a kind of Moore’s Law is unleashed which results in rapidly dropping costs of reliable robots and creates opportunities for SMEs and for playing in a more level field. Similarly, countries that focused early on creating the conditions for smart manufacturing to thrive reap rewards—especially if they have managed the transition by fostering the deployment of technologies that work as “co-operators” and not mere replacement for humans. Grievances about job losses remain, however, and the process of transition for some workers, and states, becomes dire.

### *Global governance implications:*

How would the current social contract change in the case of widespread adoption of robots and new manufacturing technologies? Even if it is merely niche, and confined to certain states and sectors, it would represent a transformation of traditional processes of production and perceptions of the workplace. Robots could be a complement of humans (Sachs, Benzell and LaGarda, 2015), able to increase productivity and boost demands for reduced working hours, but, at the same time, fear of robots “stealing” jobs from blue-collar workers (Frey and Osborne, 2017) could cause unease amongst many citizens.

Of course, policies addressing these complains could be implemented. For instance, a Universal Basic Income or activation programs, in order to better re-train those whose jobs have been lost. However, these processes, as stated before, could have long transitional periods. Between lay-offs and re-incorporation into the market, creation of new jobs, or establishing protective social policies, there could be a gap of years. How would this affect the world in 2030, when the transition should barely be starting? The adoption of these new policies to provide compensating effects for possible job losses could also produce internal turmoil and further polarization, even in authoritarian regimes.

This, in turn, could influence security (WP 4.1). Countries in disarray, trying to juggle between the adoption of new manufacturing technologies and tackling social unrest could find themselves vulnerable to attacks, in many fronts, by other states or terrorist groups. With warring populations, or a great division between social groups, security breaches could be more easily exploited. The weakening of community ties can also help in the spread of misinformation, as well as other types of attacks that weaken political processes in the country.

It must also be noted what the effect of war and political systems could be. A new arms race where the most developed countries, with access to more technologies and bigger scale economies, devote more percentage of their GDP to defence? Or an opportunity for dictators to solve their “dilemma” (Greitens, 2016) by confronting factions from their army to avoid a coup while using drones and other technologies to prevent contentious movements?

The climate change angle of this uncertainty should also be addressed (WP 5.1). Technological development can lead to better tools not only to mitigate the effects of climate change, but also for adaptation in cities, regions or even states. However, the resulting inequality in development of these technologies could reinforce processes of climate migration and instability across frontiers (WP 4.1).

## **3.3 Corporate landscape**

### *Description:*

By 2030, have market structures evolved to consolidate the concentration of economic power in the hands of a small group of corporations, effectively creating oligopolies—mainly driven by the expansion of the market and financial power of digital empires? Or have anti-trust and





similar policies to assert the control of the state led to break-ups and other constraints on the expansion of digital mega-corporations resulting in more dispersed markets?

*Determinants of change:*

- Following the rapid growth of digital and “platform” companies, their market and financial power has expanded to unprecedented levels: the market capitalization of just seven companies (five from the US and two from China) represent close to 10% of global market capitalization. These companies have been harbingers of innovation and have changed many aspects of everyday life—for individuals and business alike. Dynamics such as the migration to the “cloud” and AI applications fed by the massive data stored there has the potential to accelerate such concentration.
- In another indication, half of the contracts of the Department of Defence of the US have been allocated to the same 5 companies, and companies such as Google or Amazon have spoken about their key role in the AI race or the protection of national security.
- There is, however, concern with the stifling of innovation that these companies could be ensuring with their dominance of the corporate landscape. By “consolidating” themselves they effectively absorb promptly or preclude competitors, which could be more innovative and dynamic, as well as becoming part of a more diverse landscape (Sitaraman, 2020). At the same time, by being too big to fail, or to be broken and having such a strong economic power, they also can have the ability to hold their HQ country hostage of their demands under threat of migrating.
- Digitalization and globalization have been also forces working in the background of this expansion, allowing these corporate empires to move into the realm of the internet and less regulated areas, co-opting markets that were out of reach for previous big corporations. In the international sphere, by effectively transcending national borders, and barring strong global regulations, they can avoid being kept in check for their activities and projects. All these concerns could well create impetus for policy and regulatory intervention to change the dynamics of consolidation.

*Opposing end-points:*

Thus, we envision two possible end-points in the continuum of possibilities. One of them is a further consolidation as corporate digital empires keep snowballing and absorb or derail possible competitors and alternatives while asserting their vital role across a series of key markets in different states. This situation would imply that virtually all companies (large and small) would have to become part of their ecosystems and many states would end up being dependant on a small number of corporations for their technological future.

The other end-point is a backlash driven both by citizen concerns over these huge ‘big brothers’ and by state concerns over control. The result would be strong anti-trust laws and a series of global norms (including on taxation) and international agreements that force break-ups, spin-offs, divestitures, and limit the scope of activity (for instance financial services) of the large digital corporations. Through distribution of power across other emerging



corporations and ensuring a level playing field, competition could be re-sparked. Citizens, at the same time, would see an increased diversity of options in their digital activities.

*Global governance implications:*

There have been proposals in favour of breaking up “Big Tech” in the US (Sitaraman, 2020), in order to preserve competition and ensure a level playing field for companies willing to enter the market. A similar argument has been put forward by the EU, whose Digital Services Act (DSA) is an attempt to preserve competition and avoid the excessive power of “gatekeepers”, such as Amazon. It has also been said that by preserving these oligopolies, innovation would stifle, and that a strong push for anti-trust laws (Hovenkamp, 2019) is necessary. Without controls or competence, these companies can set their own rules, effectively becoming “the only game in town”.

However, although there have been attacks against the effectiveness of breaking up these companies on economic terms (Karabell, 2020), we should also look at possible security concerns associated with this end-point. Strong anti-trust laws as the ones suggested previously could lift the floor for smaller companies but, at the same time, weaken national security (WP 4.1). Could states prevent takeovers by foreign firms without powerful “technology champions”? Would that very digital security be threatened on the face of attacks by states with effective monopolies and scale economies for their technological advancements? And how would these corporations react to attacks on their pre-eminence? Conversely, that end-point could also provide safeguards for traditional understandings of self-determination and democracy. The outlined vision of corporate digital empires could effectively increase the security of the nations where the HQ of those empires are, but, at the same time, reduce that of the others. It would probably weaken democratic processes. As we have said, unaccountable corporations taking decisions that affect the life of millions that do not have a say in those policies could be harmful both for the stability of the financial system (WP 6.1) and for international security (WP 4.1)

And what would this make of traditional IOs? If states are moved from the centre of the IR map to put digital empires as the main actor, that would also force a new understanding of the membership to IOs (WP 7.1). New alliances in the digital realm, either of states pushing for anti-trust laws or corporations looking to solidify their gains, could be formed. Traditional institutions would need to change in both cases, either to adapt to the new dominance of these actors or to enforce those anti-trust laws globally, in order to ensure that free-rider actions by a state do not endanger the stability of the system and the national security of others.



## 4. Social Uncertainties

### 4.1 Privacy protection

#### *Description:*

By 2030, have citizens adopted protective measures against the extended use of their data by companies and governments? Have the latter also pushed for forms of data flow controls, opt-in and other forms of privacy protection? Or have all actors adopted a laissez-faire approach to this topic, given the convenience of connectivity, customization, and personalized choice?

#### *Determinants of change:*

- The growing interconnectivity of the world has brought forward a wide array of services and options for consumers across the planet. With a simple click, any individual or business can access a vast network of information, providers, offers and personally targeted content that was unthinkable two decades ago and uncommon even a decade ago. Each of these clicks, however, creates patterns of preferences which pass through algorithms to offer an even more personalized experience to the user. The associated trade-off is clear: you are giving away personal data of your habits, preferences, location, etc.; in exchange for a better information experience, more comfortability when surfing the net and greater convenience in commercial transactions.
- Part of the uncertainty is related to whether the combination of connectivity and Artificial Intelligence is going to amount to a General-Purpose Technology having a similar impact to previous ones, like electricity, and with data becoming its main fuel (PromethEUs, 2020). By feeding computers with it, they can learn through processes of deep or machine learning, improving their performance and offering better services.
- In the last years, there have been efforts to regulate the use of personal data on the internet. For instance, the European Union approved the General Data Protection Regulation (GDPR) in 2018 to set a common normative of use of personal data for businesses operating in the EU. This regulation, with its advantages and flaws, has been heralded as a model of success, inspiring legislation in places such as California or Australia (PromethEUs, 2020), and is in line with the growing preoccupation with the possible misuses of data. Will it become the norm or the exception globally?
- External shocks, such as terrorist attacks or the COVID-19 pandemic have also brought to the front of public opinion the question of the trade-offs between privacy, and the protection of the personal sphere, and security. For instance, given the focus on testing and tracing, smartphone apps that could provide governments with information about who had been in contact with someone testing positive for COVID-19 were branded as useful in the fight against the pandemic. Similarly, monitoring of data could prove useful in tracing terrorists, and thwarting their plans before a possible attack. However, there has been a lot of debate on the merits of this online tracing when compared to the technical and ethical problems that the collection of data that goes beyond personal preferences poses.

Fears of becoming “pariahs”, falsely reported positives that force those in contact to quarantine, or the collection of that very personal data by governments (in a sort of “return of the Big Brother”) have become commonplace in the last decades.

*Opposing end-points:*

Consequently, we envision two possible end-points in the continuum of possibilities that this uncertainty presents. One possibility is that citizens effectively demand tighter protection of their personal sphere, using routinely every opt-out option provided and arguing against overly complicated terms and conditions or unclear rules that must be accepted to surf through the net. At the same time, they demand accountability and sunset clauses for the use of their data in situations of crisis, and norms such as the GDPR become a standard that transcends regional boundaries. Through global arrangements, either carefully crafted or acting as patchworks for future developments, there is a pushback against possible data colonialism, and the digital realm becomes more regulated than today.

The contrary possibility is a situation of very lax forms of data protection. Either by the impact of an unexpected crisis or by the comfortability and convenience of receiving personal offers and services, citizens move away from more stringent requirements, and are happy to cede their personal information. Health-monitoring apps and carefully personalized services become the norm, and rules such as the GDPR or other forms of data protection become merely codes of “good practices” that are never institutionalized. Some countries engage in “Data colonialism”, as they use their superior cybernetic capabilities to extract data from citizens of other places. At the same time, big transnational businesses, with similar powers, also engage in these practices, rendering the self-determination of many countries irrelevant. But citizens feel that the infringements of their private and national spheres are worth the price in terms of their wellbeing—or are too hard to fight against.

*Global governance implications:*

The pandemic has brought forward applications of current technologies, and apps and ideas, such as “immunity passports” (Kofler and Baylis, 2020; Brown et al., 2020), that had been brewing but had not found their opportunity yet. How will this “critical juncture” play in the implications of these developments? Although the expansion of social media, online platforms and the Internet of Things has to some extent already prompted the growth of the data economy and reduced the privacy of citizens, this would represent another step in the invasion of the private sphere which has been a founding principle of liberal democracies, and a world of lax protection could represent a great change from the past.

Of course, if these proposals prosper, institutions such as the WHO would gain greater relevance (WP 8.1). If not only immunity passports, but also other forms of identification, characterization, and segmentation of citizens, become widespread, it would become a problem for all institutions. New challenges of security would arise (WP 4.1). Firstly, due to the possibility of effectively “hijacking” those passports and damaging the rights of individuals through cyberattacks. Secondly, as explained previously, given the potentiality for states and rogue actors to engage in data colonialism, subjecting less developed countries to another layer of oppression and putting another barrier on their path to greater prosperity. Finally, it

would also force to rethink about liberal democracy, with countries supporting a less liberal version of the political system being less worried about this reduction of the private sphere (WP 4.1). Even parties sponsoring different political systems could be empowered by these developments.

On the other hand, tighter protections, and extensions of rules such as the GDPR could expand multilateral ideas. Either by diffusion of best practices or by actual alliances of countries, from the EU to informal clusters of less developed nations (WP 7.1), willing to avoid “data colonialism”, a network of protections against excessive privacy leaks could arise. States should react appropriately, either by reforming current IOs to enshrine these principles and avoid a return to laxer protection of the rights of citizens or by setting new IOs fit for the digital age.

## 4.2 Social dynamics

### *Description:*

Has social dissatisfaction been effectively addressed by institutions, providing channels of participation and solutions to its causes? Or has it spread and become more “guerrilla-like”, locally, nationally as well transcending national borders?

### *Determinants of change:*

- This uncertainty is concerned with the evolution of forms of political action that go beyond traditional channels. More specifically, different forms of response to actual or perceived problems that demand changes across a wide range of policies or institutions, either on more liberal terms, or aiming for what has been defined as “Traditional, authoritarian and nationalist” outlooks (Hooghe, Marks and Wilson, 2002).
- These expressions of social dissatisfaction have been especially present in the last decade, with economic crises and changes in labour markets and in the global economic structure damaging the prospect of enjoying a better life than their parents for younger generations. On top of this collapse of expectations—or even opportunities— there has been a certain resurgence of the idea of the need for more direct channels of interaction with the government, as well as disputes over what has been perceived as a technocratic approach to politics. Social media has helped in providing platforms for connection (Barberá, 2015) that help in reducing the threshold for participation in demonstrations and other forms of contentious action. If parliaments and governments lose legitimacy, non-institutional action becomes more prevalent.
- Given these dynamics, the streets become a source of “voice” for those who traditionally only had the opportunity to remain loyal to certain parties, regimes, or governments, or to exit towards the abstention or exile (Hirschman, 1978). In democracies the perceived lack of representation in the circles of power (either amongst political or economic elites) leads to alternative forms of political action being perceived as one of the only ways to achieve meaningful change. Even in authoritarian contexts, the interaction of corruption, economic

damage and tiredness with the regime can turn social dissatisfaction into protests in the street which could lead either to democratization processes or harsh repression.

- Of course, these expressions of social dissatisfaction entail certain dangers. On the one hand, there is the possibility of minorities within the protesters co-opting movements for their own personal gain or for objectives which are not those of the protesting collective. It has been studied that well-organized minorities are very able to control social movements, and, consequently, stemming them towards their favourite outcomes and not the most efficient or normatively better ones.
- On the other, there is the risk of the use of violence, given the lack of fulfilment of certain objectives. A group of politically active people constantly mobilized, who does not seem to achieve any of its goals can end up exploring new avenues of contentious politics, including the use of violence. Even if non-violent forms of protests are known to have a greater chance of success (Chenoweth and Stephan, 2014), utilitarian rationality is not always the guiding principle for movements stemming from passions.

#### *Opposing end-points:*

We envision a continuum with two end-points on how this uncertainty could resolve itself by 2030. One would be a situation of guerrilla-type activity, both organized (either bottom-up or top-down), or as flare-ups given social unrests, in the streets of many countries, furthering instability. Social movements in this situation have decided that political action through formal institutional channels has proved inefficient to achieve their objectives and coordinate across national borders to present challenges to both autocratic and democratic governments. Assemblies, demonstrations, and other forms of contentious politics become the norm, with the legitimacy of traditional channels completely eroded, as well as of traditional states, with growing mistrust amongst citizens. This also causes a backlash from governments and segments of the society which oppose these changes, furthering instability, and more affectively polarized societies, without common grounds for debate or commonly recognized institutions.

On the other end-point, we see an “institutionalized” form of contentious politics, where institutions, such as government or political parties, have understood the virtues of accommodating certain demands, curtailing unrest, and providing a more direct democratic experience to citizens. Social movements also understand that a calmer route, with peaceful actions and acknowledging the legitimacy of traditional actors, is a more efficient tactic, that contributes to fulfilling their goals. Governments also open up new channels of participation, without losing sight of traditional artifacts of representation, such as voting. New methods of participation or democratic experiences could be tested to improve representation across multiple dimensions.

#### *Global Governance implications:*

A guerrilla situation would pose obvious challenges for international security (WP 4.1). Even if these forms of contentious action are able to topple autocratic governments, the void left can be filled by very different actors, and not always better than the deposed leader. There

could be a spread of instability across regions which increases the probability of conflicts. Even from a liberal perspective, with a regime transitioning from an “outlawed society” to a decent one (Rawls, 1999), there could be problems with the regime emerging, as the “social guerrilla” does not necessarily have to ask for policies aligned with traditional liberal democratic conceptions.

In fact, social guerrillas in liberal democracies could erode the legitimacy of the system. By protesting outside traditional channels of representation, citizens might be not only doubting traditional institutions, but also the very sources of liberal democracy as we understand it (WP 7.1). Concepts such as separation of powers, representative mandate or the limitation of legislative decisions by the judiciary could be put in jeopardy. It is expected that a most violent contentious action (Chenoweth, Perkosi and Kang, 2017) could also cause more backlash by governments, both authoritarian and democratic, fostering the spiral of violence and destabilization.

This, in turn, could affect IOs in their legitimacy, being perceived as out of touch with citizens and holds of power for unaccountable elites, whose policymaking affects groups who don’t have a saying in them (WP 8.1). This could be targeted even at the more “technical” IOs, normally considered as less prone to be politicized. It must be noted that this would be the case both in “guerrillas” and in institutionalized social movements, as both of the end-points acknowledge an increase in politization and participation, which would not stop at national institutions. Civic groups could claim more of a saying in the workings of all type of IOs (from the IMF to the EU), and referendums could become a more common political tool (WP 8.1).

At the same time, both processes can lead to diffusion effects and “revolutionary cascades” (Hale, 2013) that end up spreading around the world. It should be also expected that certain topics, heavily politicized and claimed by these social groups, could take a preeminent role in bilateral and multilateral negotiations, as well as being amongst the priorities of IOs. We usually think of climate change, but security concerns, migration or even what we have traditionally defined as human rights could be at the forefront of the protests, depending on the approach of protesters (Hooghe, Marks and Wilson, 2002). In any case, the increased presence of social movements and new decision structures in the national and international spheres would bring forward big changes.

### **4.3 Climate action**

#### *Description:*

Have governments, businesses, and citizens around the world—not just in predisposed places like Northern Europe—owned up to the threat of climate change? Has this been a catalyser for a change of political positions and votes, and individual consumption choices, including diet and travel? Are stakeholders moving firmly towards environmental accountability of businesses? Or has the focus been placed on the costs of action in the short-term and the immediate consequences of extreme weather events, side-lining efforts to tackle the causes of climate change?





*Determinants of change:*

- In recent years, the issue of climate change has encountered conflicting currents. On one hand, 2019 was a year which proved the political strength of the fight against climate change—showing that the 2015 Paris Agreement was not a singular moment. The spread of social movements as represented by Extinction Rebellion and Greta Thunberg served as a reminder of the support for green issues amongst young voters—as did the gains of Greens parties in Germany and the proposed European Green Deal of the new EU Commission.
- On the other hand, the question of actual burden-sharing across countries remains a potential deal-breaker. And in the United States, while one of the Biden administration’s first steps was to re-join the global community in the Paris Agreement commitments and to argue for a more ambitious approach, much of the Republican party remains lukewarm at best on climate change and they may have the means after the 2022 Congressional elections to block progress.
- Progress on climate action, thus, already faced some headwinds and they may have been compounded by the distractions implied by dealing with the COVID crisis. On the one hand, the perception of existential threats could have an impact on citizens’ fear of climate change. Besides, confinements during the crisis have given a taste of alternative lifestyles, with reduced mobility and virtually no international travel, and has given hope that the crisis will provide a boost to action on climate and avoiding disastrous climate change. Corporations, NGOs, and citizens have also taken stances, with the latter demanding that the former play a greater role in fighting against climate change. Wildfires, floods and increases of temperatures could also play in favour of demands for more urgent action against climate change.
- On the other hand, the economic impact of the crisis and the related increase in public debt levels could well result in “putting money on the table now” attitude and worrying about fiscal constraints instead of focusing on the long-term future of the planet. Perceptions of uneven burdens of carbon prices and other emissions reduction measures could add fuel to the fire of protests like those of the yellow vests in France and make travel less affordable for wage earners.
- How this tension will be resolved will hinge to a large extent on the relative strength of constituencies defending their short-term economic interests (and scepticism, self-interested or not) relative to that of movements convinced of the importance of climate action to protect the legacy of the planet for future generations—and “walking the talk” to that effect in their personal choices. How that dynamic plays out across countries—especially the ones whose action will be most significant for climate change mitigation—will be decisive. Can actors such as social movements craft the fight against climate change as part of a “just transition” that will also be positive for blue-collar workers who could feel threatened by it? Can the latter force defenders of more extended green policies to concede on points to defend certain lifestyles?



### *Opposing end-points:*

In the continuum of possible outcomes by 2030, we first envision an end-point where these movements start to fade, and support for green policies is wavering. Given more pressing concerns, such as economic crises or geopolitical tensions, both citizens and states focus on solving those problems first, adopting only remedial adaption measures against the effects of climate change-related events, such as storm surges or floods. Habits of consumption of the growing middle classes in emerging countries replicate the old environmentally insensitive path of advanced countries, and the prospects of “green new deals” or “green jobs” either fail to accomplish their goals or are erased in favour of policies which provide more immediate results. Finally, the transition towards more usage of low-carbon energy sources is slower than expected, given that there is little policy support. Adaptation policies against the effects of climate change are adopted on an ad-hoc basis, little is done on mitigation and climate finance promises remain largely unfulfilled.

On the other hand, we see a world where climate change action has become intense across all domains. On the political front, not only green parties, but also other political families try to develop ambitious policies that can combine economic recovery and growth with green initiatives. Social movements keep on pressing and are able to sit down with politicians of all ideologies to ensure their concerns are heeded, and corporations shift business models towards a greater emphasis on sustainability. Habits of consumption change, becoming more environmentally conscious and attitudes towards policies on renewable energy are positive. Safe nuclear reactor pilots have shown real promise for this source of energy to overcome concerns rooted in old nuclear technology.

To make this global win politically sustainable, countries will need to pursue avenues for effectively growing, redistributing, and decarbonising, which might have required major changes to the economic systems and successful effort in green technologies. The push in green R&D would generate a race to the top in climate ambition, as it is perceived to be a catalyser for technological and industrial leadership with geopolitical implication. And in terms of global stability, it will have been necessary to make progress on mechanisms (domestic and international) to address loss and damage.

### *Global governance implications:*

Virtually all countries—now including the superpowers—agree that climate change is a fight with unescapable global implications and one that requires both determined national action and concerted international efforts. Recent statements by Biden’s administration, China, Japan, or South Korea have reinforced the commitment of these countries to become not just carbon-neutral but to ensure that energy use is compatible with a clean, sustainable future.

In a world where climate change action does not take priority and floods, droughts and other climate change-related effects provoke ad hoc remedial action and some adaptation measures, there will be limited pressure on institutional development and on building up capabilities for multilateral action. In the short term, this could reduce the appetite for investments in decarbonization, as well as renewable and clean energy sources. But as climate change impacts intensify and global warming consequences mount, there will be a



need for institutional reform and regulatory action to deal with a range of implications including liability issues and insurance claims.

Conversely, if climate action is the main priority for almost all governments, especially superpowers, financial markets and IOs should react accordingly. Institutions could adopt new policies more based on best practices in the “green economy”. For instance, future renovations of the Basel Accords could take into account “green” requirements in definitions of risk capital. At the same time, diffusion effects could bring regional clusters such as the African Union or the ASEAN towards green-based agreements (WP 7.1). This would entail reforms in the working of these IOs, perhaps enshrining the protection of the planet as one of their founding principles. If green, alternative, libertarian (GAL) preferences of citizens across the world also increase, correlating with an increased perception of the dangers of climate change and the opportunities for a green recovery, it could also foster the legitimacy of these IOs (WP 8.1).

Finally, it would be necessary to see what the evolution of green parties is in democracies of all kinds. After their successes in the 80s, and their relative fall in the 90s and early 2000s, they could now become more “large tent” parties than merely “niche” ones (Meguid, 2005). More liberal voters, as well as social democrats, could opt for them as a vote against mainstream options, and as a way of showing their preoccupation with a post-material issue (Inglehart) that could have material consequences. Additionally, the push of private corporations, NGOs and civic groups could force states and IOs to change their perspectives, even if faith declines in the capacity of “Green New Deals” to kickstart economies.

## Bibliography for Annex 1

Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188-2244.

Aklin M. and Mildenberger M. (2020). Prisoners of the Wrong Dilemma. *Global Environmental Politics*, 20:4

Atkinson, A. B. (2015). *Inequality: What can be done?*. Harvard University Press.

Ayers, J. (2010). *Understanding the adaptation paradox: can global climate change adaptation policy be locally inclusive?* (Doctoral dissertation, The London School of Economics and Political Science).

Balz, D. (2020) Government is everywhere now. Where does it go next? *Washington Post*. Available online at: <https://www.washingtonpost.com/graphics/2020/politics/pandemic-government-role/>

Barberá, P. (2015). Birds of the same feather tweet together: Bayesian ideal point estimation using Twitter data. *Political analysis*, 23(1), 76-91.

Berlin, I. (1969). Two concepts of liberty. *Berlin, I.*, 118(1969), 172. Available online at: <https://web.ics.purdue.edu/~mjaCOVID/Two%20Concepts.pdf>

Bradford, A. (2020). *The Brussels effect: how the EU rules the world*. Oxford University Press. Oxford.

Brancati, D. (2006). Decentralization: Fuelling the fire or dampening the flames of ethnic conflict and secessionism? *International organization*, 651-685.



- Bremmer, I. (2009). State capitalism comes of age-the end of the free market. *Foreign Affairs*, 88, 40.
- Brown, R. et al. (2020). The scientific and ethical feasibility of immunity passports. *The Lancet Infectious Diseases*.
- Chenoweth, E., & Stephan, M. J. (2014). Drop your weapons: When and why civil resistance works. *Foreign Aff.*, 93, 94.
- Chenoweth, E., Perkosi, E., & Kang, S. (2017). State repression and nonviolent resistance. *Journal of Conflict Resolution*, 61(9), 1950-1969.
- Crabtree, J. et al. (2020). The future of the state: ten leading global thinkers on governments after the pandemic. *Foreign Policy*. Available online at: <https://foreignpolicy.com/2020/05/16/future-government-powers-coronavirus-pandemic/>
- Farrell, H., & Newman, A. L. (2019). Weaponized interdependence: how global economic networks shape state coercion. *International Security*, 44(1), 42-79.
- Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerization? *Technological forecasting and social change*, 114, 254-280.
- Greitens, S. C. (2016). *Dictators and their secret police: Coercive institutions and state violence*. Cambridge University Press.
- Hale, H. E. (2013). Regime change cascades: What we have learned from the 1848 revolutions to the 2011 Arab uprisings. *Annual Review of Political Science*, 16, 331-353.
- Hemerijck, A (2018). "Social investment as a policy paradigm." *Journal of European public policy* 25.6: 810-827.
- Hirschman, A. O. (1978). Exit, voice, and the state. *World Politics: A Quarterly Journal of International Relations*, 90-107.
- Hooghe, L., Marks, G. N., & Schakel, A. H. (2010). *The rise of regional authority: A comparative study of 42 democracies*. Routledge.
- Hooghe, L., Marks, G., & Wilson, C. J. (2002). Does left/right structure party positions on European integration?. *Comparative political studies*, 35(8), 965-989.
- Hovenkamp, H. (2019). The Warren Campaign's Antitrust Proposals. *The Regulatory Review* (March 2019), 19-14.
- IBM (2020). AI in 2020: from experimentation to adoption. Available online at: <https://www.ibm.com/blogs/think/2020/01/ai-in-2020-from-experimentation-to-adoption/>
- Jupille J., Walter Mattli W. and Duncan Snidal D. (2013). *Institutional Choice and Global Commerce* (New York, NY: Cambridge University Press)
- Kalyvas, S. N. (2019). The landscape of political violence. In *The Oxford Handbook of Terrorism* (p. 11). Oxford University Press.
- Karabell, Z. (2020). Don't break up big tech. *Wired*. Available online at: <https://www.wired.com/story/dont-break-up-big-tech/>
- Keohane, R. O., & Victor, D. G. (2011). The regime complex for climate change. *Perspectives on politics*, 7-23.
- Kofler, N., & Baylis, F. (2020). Ten reasons why immunity passports are a bad idea.
- Meguid, B. M. (2005). Competition between unequals: The role of mainstream party strategy in niche party success. *American Political Science Review*, 347-359.
- Milanovic, B. (2013). Global income inequality in numbers: In history and now. *Global policy*,



4(2), 198-208.

Mudde, C., & Kaltwasser, C. R. (2013). Populism. In *The Oxford handbook of political ideologies*.

Mudde, C., & Kaltwasser, C. R. (Eds.). (2012). *Populism in Europe and the Americas: Threat or corrective for democracy?* Cambridge University Press.

Pew Research Center (2019). Smartphone ownership is growing rapidly around the world, but not always equally.

Pierson, P. (1994). *Dismantling the welfare state?: Reagan, Thatcher and the politics of retrenchment*. Cambridge University Press.

Pierson, P. (1996). The new politics of the welfare state. *World politics*, 48(2), 143-179.

PromethEUs (2020). The N(EU) way to Artificial Intelligence. Challenges and perspectives for Southern Europe. Available online at:  
<https://www.prometheusnetwork.eu/publications/artificial-intelligence-southern-europe-prometheus-publication/>

PWC (2017). Sizing the price: what's the real value of AI for your business and how can you capitalise? Available online at: <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>

Rawls, J. (1999). *The law of peoples: with, the idea of public reason revisited*. Harvard University Press.

Rodrik, D. (2011). *The globalization paradox: democracy and the future of the world economy*. WW Norton & Company.

Sachs, J. D., Benzell, S. G., & LaGarda, G. (2015). Robots: Curse or blessing? A basic framework (No. w21091). National Bureau of Economic Research.

Sassen, S. (2013). *The global city*. Princeton University Press.

Sitaraman, G. (2020). Too big to prevail: the national security case for breaking up Big Tech. *Foreign Affairs*. Available online at: <https://www.foreignaffairs.com/articles/2020-02-10/too-big-prevail>

Stepan, A. (2005). Federalism and democracy: Beyond the US model. In *Theories of Federalism: A reader* (pp. 255-268). Palgrave Macmillan, New York.

Thompson, N. (2018). Emmanuel Macron talks to Wired about France's AI strategy. *Wired*. Available online at: <https://www.wired.com/story/emmanuel-macron-talks-to-wired-about-frances-ai-strategy/>

United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019: Volume I: Comprehensive Tables*.

Weber, M. (2008). *Max Weber's complete writings on academic and political vocations*. Algora publishing.

Wolters, L. (2020). Robots, automation, and employment: where we are.

WTO (2020) End-year trade monitoring report 2020. Available online at:  
[https://www.wto.org/english/tratop\\_e/tpr\\_e/tmfactsheed2020\\_e.pdf](https://www.wto.org/english/tratop_e/tpr_e/tmfactsheed2020_e.pdf)



## ANNEX 2 ISSUE AREA-SPECIFIC MATRICES FOR CONSULTATIONS

The following matrices contain a sample set of concrete questions that may serve as a basis for reflection per issue area.

GLOBAL GOVERNANCE OF TRADE AND DEVELOPMENT	Drifting	Shifting	Rising	Flowing
<p>What <b>formal global intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• Are the WTO and World Bank central? Are they perceived as legitimate/holding authority?</li> <li>• How have new institutions such as the New Development Bank and the AIIB evolved?</li> <li>• What challenges do these organizations face?</li> </ul>				
<p>What <b>informal intergovernmental organizations</b> are relevant in this world?</p> <ul style="list-style-type: none"> <li>• Are the G7/8/20 still relevant? Are they perceived as legitimate?</li> <li>• What roles do they play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>formal regional intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• How has the EU evolved?</li> <li>• How have MERCOSUR and ASEAN evolved?</li> <li>• What role do regional development banks play? Have they proliferated?</li> <li>• What challenges do they face?</li> </ul>				
<p>What is the role of <b>sub-state and non-state actors</b> (public and private) in global governance in this world?</p> <ul style="list-style-type: none"> <li>• Have these actors and the organizations/networks/partnerships seen an increase or decrease in their legitimacy, authority, ...?</li> <li>• What roles do voluntary standards by private actors play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What is the <b>overall shape</b> of the regime complex/governance architecture for trade and development in this world?</p> <ul style="list-style-type: none"> <li>• What trends are at play?</li> <li>• Have regional and bilateral agreements continued to proliferate?</li> <li>• Are there noteworthy developments?</li> <li>• Who are the main actors?</li> </ul>				

GLOBAL GOVERNANCE OF SECURITY	Drifting	Shifting	Rising	Flowing
<p>What <b>formal global intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• What role does the UN play? Has the UNSC been reformed?</li> <li>• Are the IAEA and NPT still central in nuclear non-proliferation?</li> <li>• What is their level of legitimacy/authority?</li> <li>• What challenges to they face?</li> </ul>				
<p>What <b>informal intergovernmental organizations</b> are relevant in this world?</p> <ul style="list-style-type: none"> <li>• What role do international contact groups such as the P5+1 play?</li> <li>• What is their role?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>formal regional intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• What role do they play?</li> <li>• What challenges do they face?</li> <li>• How have the roles and interaction of NATO, the OSCE and the EU evolved?</li> </ul>				
<p>What is the role of <b>sub-state and non-state actors</b> (public and private) in global governance in this world?</p> <ul style="list-style-type: none"> <li>• What role do private military and security companies play?</li> <li>• What roles do civil society organizations play?</li> </ul>				
<p>What is the <b>overall shape</b> of the regime complex/governance architecture for security in this world?</p> <ul style="list-style-type: none"> <li>• Are there noteworthy developments?</li> <li>• Who are the most important actors?</li> <li>• Is the human security perspective prevalent in global security governance?</li> <li>• How is international terrorism dealt with? Has a specific organization emerged on this issue?</li> <li>• How is cybersecurity dealt with? Has a specific organization emerged on this issue?</li> </ul>				



GLOBAL GOVERNANCE OF CLIMATE CHANGE	Drifting	Shifting	Rising	Flowing
<p>What <b>formal global intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• Are the UNFCCC and the IPCC the central organizations? Has their legitimacy/authority remained stable?</li> <li>• Have further agreements or protocols been reached under the UNFCCC?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>informal intergovernmental organizations</b> are relevant in this world?</p> <ul style="list-style-type: none"> <li>• What role do the G7/8/20, and climate clubs play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>formal regional intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• What role do regional organizations such as the African Union (AU) or ASEAN play?</li> <li>• What role does the EU play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What is the role of <b>sub-state and non-state actors</b> (public and private) in global governance in this world?</p> <ul style="list-style-type: none"> <li>• Have cities and sub-state authorities taken on a larger role in climate change governance, and what shape has this taken?</li> <li>• What role do private standard-setting initiatives play?</li> <li>• What role are grassroots movements and NGOs playing?</li> <li>• Have independent national advisory bodies taken a more prominent role?</li> </ul>				
<p>What is the <b>overall shape</b> of the regime complex/governance architecture for climate change in this world?</p> <ul style="list-style-type: none"> <li>• Are there noteworthy developments?</li> <li>• Who are the main actors?</li> <li>• What trends are at play? Is climate governance increasingly hybrid and fragmented?</li> <li>• Have adaptation and loss and damage become more prominent in the governance architecture? What institutions have emerged for these two pillars?</li> </ul>				

GLOBAL GOVERNANCE OF FINANCE	Drifting	Shifting	Rising	Flowing
<p>What <b>formal global intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• What is the role of the IMF and WB, and what is their level of legitimacy/authority?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>informal intergovernmental organizations</b> are relevant in this world?</p> <ul style="list-style-type: none"> <li>• Has the G7/8/20 increasingly stepped into global financial governance?</li> <li>• What roles do the Bank of International Settlements, the Basel Committee on Banking Supervision, and the Financial Stability Board play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What <b>formal regional intergovernmental organizations</b> characterise this world?</p> <ul style="list-style-type: none"> <li>• What role do regional intergovernmental organizations play?</li> <li>• What challenges do they face?</li> </ul>				
<p>What is the role of <b>sub-state and non-state actors</b> (public and private) in global governance in this world?</p> <ul style="list-style-type: none"> <li>• What organizations/partnerships/networks consisting of private actors exist, and how much of a role do they play?</li> <li>• Do NGOs and civil society organizations play a role in finance governance?</li> </ul>				
<p>What is the <b>overall shape</b> of the regime complex/governance architecture for finance in this world?</p> <ul style="list-style-type: none"> <li>• Are there noteworthy developments?</li> <li>• Who are the main actors?</li> <li>• What trends are at play? Has the global governance of finance become more consolidated? Or more fragmented?</li> <li>• Does the governance of this field continue to be dominated by technical and professional experts?</li> </ul>				

## **ANNEX 3 NOTES FROM CONSULTATIONS WITH IAB MEMBERS**

On June 8<sup>th</sup>, 2021, we organized a consultation session with our GLOBE International Advisory Board (IAB). The members of the IAB attending were: Pascal Lamy, Connie Hedegaard, Miles Kahler, Antoni Estevadeordal, and Uttara Sahasrabuddhe. The purpose of this meeting was to present the four World Scenarios and generate a discussion related to the Global Governance component of the report. In this discussion, the IAB members reflected on the overall quality of the report and delved into global governance in each of the scenarios and issue areas. This was done on the basis of a preparatory document containing guiding questions that was provided prior to the meeting. The topics that were discussed included:

- The EU as a global actor in the current geopolitical context.
- The North-South division and its implications for global governance.
- The impact of COVID-19 on global governance.
- The distinction between the 'old world of trade' and the 'new world of trade'.
- The importance of tackling climate change.
- The increasing relevance of NSAs in global governance.
- The relationship between economic growth and well-being.
- Informal intergovernmental institutions and ad hoc cooperation.
- The importance of technology in relation to the economy and security.
- Coalitional governance models and orchestration dynamics.
- Multilevel convergence and complexity, cross-cutting issue convergence and one-level convergence in global governance.
- Regionalization and non-institutionalized regional security cooperation.
- Concern with the assertion of national sovereignty.
- The role of superpowers and regional powers.

The output from this discussion was revised and compiled into a document, which was later incorporated into our global governance matrices. The discussion, in addition to further consultations with GLOBE partners, a review of external literature, and WPs 3-8, formed the basis of our global governance scenarios.



## **ANNEX 4 NOTES FROM CONSULTATIONS WITH GLOBE PARTNERS**

On June 9<sup>th</sup>, 2021, we organized an online discussion on global governance scenarios with GLOBE partners. During this exercise GLOBE partners were separated into groups by issue area, according to their expertise. The discussion was structured through the use of issue-specific matrices – see Annex 2 – and centred around the different possible global governance outcomes in each World Scenario, for their respective issue areas. This included a reflection on key institutions, their development path to 2030, their legitimacy, authority, and effectiveness, as well as their main challenges. Further, GLOBE partners also reflected on important trends and other developments in their issue area for each of the scenarios. The topics discussed included:

- The evolution of the World Trade Organization (WTO), the World Bank, the Asian Infrastructure Development Bank (AIIB), and other trade and development institutions.
- The role of informal organizations and NSAs in global governance.
- The tension between legitimacy and authority at the United Nations Security Council (UNSC).
- The role of technology in security governance.
- Critical junctures in the fight against climate change.
- The transformative potential of technology in the context of climate change.
- The evolution of the UNFCCC.
- Fragmentation of governance.
- Democratization of multilateral structures.
- Regionalization and regional actors.
- Functional differentiation in financial regulation.
- Regional financial orders.
- Informality in financial governance.

The output from these discussions was included in the matrices in Annex 5, which were used for the elaboration of the Global Governance component of the report.



## ANNEX 5 GLOBAL GOVERNANCE MATRICES PER ISSUE AREA

### Global governance matrix for Drifting

	Climate	Finance	Trade & Development	Security
<b>Global FIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>FIGOs lose authority, credibility, and legitimacy.</li> </ul> <p><b>UNFCCC and Paris Agreement (PA):</b></p> <ul style="list-style-type: none"> <li>Largely irrelevant.</li> <li>UNFCCC has no authority or legitimacy.</li> <li>Countries pull out of the PA.</li> <li>Little or no compliance with existing NDCs.</li> <li>International NGOs decry lack of compliance.</li> <li>BY 2030 many countries do not submit NDCs.</li> <li>Resource constraints exacerbate.</li> </ul> <p><b>Intergovernmental Panel on Climate Change (IPCC):</b></p> <ul style="list-style-type: none"> <li>Loss of support from US and other fossil fuel producing countries.</li> <li>Difficulty producing politically acceptable but scientifically sound results.</li> <li>Becomes irrelevant.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Separate institutions for each sphere.</li> <li>Fragmentation of the global financial safety net (coordination split between AMF and IMF).</li> </ul> <p><b>Bank for International Settlements (BIS):</b></p> <ul style="list-style-type: none"> <li>Retains central position in US sphere.</li> <li>Coordination, banking regulation, information sharing for central banks, lending to central banks...</li> <li>Exclusive.</li> <li>High influence of the EU, US, G10.</li> <li>China disengages from this institution.</li> <li>Basel IV collapses.</li> </ul> <p><b>International Monetary Fund (IMF):</b></p> <ul style="list-style-type: none"> <li>Reorients activities towards US sphere.</li> <li>Crisis finance.</li> <li>Institutional reforms fail. Governance structure not adapted to shifting global economic landscape.</li> <li>Competes with AMF in non-aligned countries.</li> <li>Legitimacy issues from the perspective of countries in the Global South/emerging powers.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Separate trade and development institutions for each sphere.</li> </ul> <p><b>World Trade Organization (WTO):</b></p> <ul style="list-style-type: none"> <li>Old WTO inoperative.</li> <li>Disputes over Appellate body unresolved.</li> <li>Breach of WTO rules.</li> </ul> <p><b>Global Trade Organization (GTO):</b></p> <ul style="list-style-type: none"> <li>Emerges in US sphere to replace WTO.</li> <li>Limited success as protectionism is widespread.</li> </ul> <p><b>Pacific Trade Cooperation Organization (PTCO):</b></p> <ul style="list-style-type: none"> <li>Emerges in Chinese sphere to replace WTO.</li> <li>Limited success as protectionism is widespread.</li> </ul> <p><b>World Bank (WB):</b></p> <ul style="list-style-type: none"> <li>Reorients activities towards US sphere.</li> <li>Institutional reforms fail. Inability to incorporate concerns from emerging economies.</li> <li>Legitimacy issues from the perspective of Global South.</li> <li>Competition with AIIB in non-aligned countries.</li> </ul> <p><b>New Development Bank (NDB):</b></p>	<p><b>United Nations Security Council (UNSC):</b></p> <ul style="list-style-type: none"> <li>In handcuffs, no incentive for P5 reform.</li> <li>Pushing towards informal configurations.</li> <li>Despite growing antagonism, neither China nor US exit UNSC.</li> <li>Much more restrictively used and narrowly focused organization.</li> <li>Retains its authority from the perspective of the P5 members.</li> <li>In terms of legitimacy, there are difficulties in how other (emerging) powers deal with being kept out of the UNSC (India, Japan, Germany, Brazil).</li> <li>Legitimacy also much more difficult to maintain in the eyes of most members due to inaction/paralysis.</li> </ul> <p><b>International Atomic Energy Agency (IAEA) &amp; Non-Proliferation Treaty (NPT):</b></p> <ul style="list-style-type: none"> <li>Remains in place, partly because UNSC retains its influence.</li> <li>No reductions in nuclear stockpiles.</li> </ul> <p><b>Interpol:</b></p>

		<ul style="list-style-type: none"> <li>Conditionality as a contentious issue.</li> </ul>	<ul style="list-style-type: none"> <li>Merges with AIIB.</li> <li>Contingent Reserve Arrangement (CRA) develops into AMF.</li> </ul>	<ul style="list-style-type: none"> <li>Breaks down as willingness to share information declines.</li> <li>Replaced with regional versions.</li> </ul> <p><b>International Criminal Court (ICC):</b></p> <ul style="list-style-type: none"> <li>Still exists, but in name only.</li> </ul>
<b>Regional FIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Some climate action at the regional level, but mostly superficial as other priorities arise.</li> <li>Growing N/S divide.</li> <li>Focus on adaptation (information sharing, best practices, etc.).</li> <li>Potentially an aggressive China securitising climate change to project power regionally.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Loss of political will and leadership position.</li> <li>Support for deregulation of climate policy from some MS (regulatory race to the bottom).</li> <li>Commission loses legitimacy and authority to enforce climate policy.</li> <li>Relatively vocal constituencies.</li> <li>Loss of support for environmental justice/social dimension of environmental issues.</li> <li>Concerns for energy security and import dependence on Russia</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Increasing fragmentation leads to the emergence of regional financial arrangements that evolve separately, with no linkages between them.</li> <li>China plays a more assertive role in global financial governance through regional institutions (Zhang, 2020).</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Retains central position in US sphere, especially through dominance in the BIS.</li> <li>More formal than other regions.</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>Divided between US and China.</li> <li>Regional initiatives do not advance much in terms of institutionalization.</li> <li>Chiang Mai Initiative Multilateralization (CMIM) delinked from IMF and linked to AMF (Henning, 2006; Grimes &amp; Kring, 2020).</li> </ul> <p><b>Asian Monetary Fund (AMF):</b></p> <ul style="list-style-type: none"> <li>Main financial organization in Chinese sphere (Henning, 2006).</li> <li>Develops from Contingent Reserve Arrangement (CRA).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Role facilitating intra-regional trade.</li> <li>Little involvement in dispute resolution.</li> <li>ASEAN, MERCOSUR, African Union take a more prominent role.</li> <li>Regional powers take an active role in regional organizations.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Single market remains in place, but there are talks of intra-regional tariffs in some sectors.</li> </ul> <p><b>Asian Infrastructure Investment Bank (AIIB):</b></p> <ul style="list-style-type: none"> <li>Increased role.</li> <li>Competes against WB and Asian Development Bank in non-aligned countries.</li> <li>Focus on Chinese sphere.</li> <li>From regional to global institution.</li> <li>Absorbs NDB.</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>Divided between the US and China.</li> <li>Single market aspirations halted.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Regional organizations become much more important (Wang, 2020).</li> <li>Regional powers speaking on behalf of their areas of influence (Wang, 2020).</li> <li>Regional organizations managing competing preferences internally.</li> <li>Efforts at regional/bloc affiliated cybersecurity governance.</li> </ul> <p><b>NATO:</b></p> <ul style="list-style-type: none"> <li>Increasingly focuses on Chinese influence in Pacific space.</li> <li>Still plays a role and the EU has not taken over its functions nor made much progress in CSDP.</li> <li>The US is still invested in European security, but the economic situation and focus on China makes it necessary for it to divest resources elsewhere.</li> </ul> <p><b>OSCE:</b></p> <ul style="list-style-type: none"> <li>Inactive.</li> <li>Attention to its mission diminishes because states are tending to other issues.</li> </ul>



	<p>could foster support for renewables.</p> <p><b>African Union, ASEAN, Inter-American Institute for Global Change Research (IAI):</b></p> <ul style="list-style-type: none"> <li>• Meta-governance function.</li> <li>• Developing regional specific principles.</li> <li>• No enforcement authority.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Food security and water availability as important issues.</li> <li>• Urgent need for financing.</li> <li>• Adaptation costs rising dramatically.</li> </ul>		<ul style="list-style-type: none"> <li>• Protection of politically important enterprises.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Highly critical of IMF and WB.</li> <li>• Regional Economic Communities (RECs) deepen ties (Parshotam, 2018).</li> <li>• Maintain Agenda 2063 focus on intra-regional trade (Parshotam, 2018).</li> <li>• Dependent on foreign aid.</li> </ul> <p><b>Asian Development Bank (ADB):</b></p> <ul style="list-style-type: none"> <li>• Membership reduced (e.g., loses some regional members such as some Central Asian countries).</li> <li>• US dominated, focus on US client states.</li> <li>• Competes with AIIB.</li> </ul>	<ul style="list-style-type: none"> <li>• The political schism already existing within the organization only widens.</li> </ul> <p><b>Shanghai Cooperation Organization (SCO):</b></p> <ul style="list-style-type: none"> <li>• Gains more prominence although it has lost India as a member.</li> <li>• Maintains Chinese influence in Central Asia (Korosteleva &amp; Petrova, 2020).</li> <li>• Emerging security architecture in Chinese sphere (MacHaffie, 2021).</li> <li>• Maintaining stability in Chinese neighbourhood (combatting extremism, separatism) (MacHaffie, 2021).</li> <li>• Tension between Russia and China.</li> <li>• Involved in Afghanistan.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Heavily engaged in conflict prevention, mediation, resolution; especially due to immobilization UNSC and diminished role of the EU in the region.</li> <li>• China provides funds for some of the organization's programs, particularly in the African countries it is most interested in.</li> </ul>
<b>IIGOs</b>	<p><b>G-groups:</b></p> <ul style="list-style-type: none"> <li>• G7 and G20 replaced by minilateral groupings of countries.</li> </ul> <p><b>Ministerial on Climate Action:</b></p> <ul style="list-style-type: none"> <li>• Stops meeting.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Informalization of relations between global financial actors continues to rise, and this remains the main game for global financial regulation.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Preference for more informal fora.</li> </ul> <p><b>G-groups:</b></p> <ul style="list-style-type: none"> <li>• G20 inactive.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Nation states may not rely on IG institutions, may carry the process of security GG through ad hoc groups of</li> </ul>

	<p><b>Wildcard:</b></p> <ul style="list-style-type: none"> <li>Some bloc-affiliated informal intergovernmental organizations (IIGOs) established to address geoengineering (preventing geoengineering actions by rogue actors or states).</li> </ul>	<ul style="list-style-type: none"> <li>Cooperation/coordination does not advance, or even retreats.</li> </ul> <p><b>G20:</b></p> <ul style="list-style-type: none"> <li>Previously at the core of global financial governance (Zhang, 2020), but no longer active.</li> <li>Replaced by G10.</li> </ul> <p><b>Financial Stability Board (FSB):</b></p> <ul style="list-style-type: none"> <li>Organizational structure not reformed.</li> <li>China disengages from this institution.</li> <li>Main IIGO for coordination of financial issues in US sphere.</li> <li>Loose cooperation.</li> </ul>	<ul style="list-style-type: none"> <li>Replaced by G10.</li> </ul> <p><b>D10 “Ten Democracies”:</b></p> <ul style="list-style-type: none"> <li>Pan-regional technological cooperation to compete against Chinese technological development.</li> </ul>	<p>countries or merely bilaterally.</p> <ul style="list-style-type: none"> <li>“International contact groups” to address concrete conflicts.</li> <li>Informal configurations to avoid deadlock at Security Council.</li> <li>The Quadrilateral Security Dialogue might gain relevance and even see a push for institutionalization.</li> <li>Russia – China cyber-alliance for internet sovereignty, supporting domestic digital champions (Budnitsky &amp; Jia, 2018).</li> <li>IIGOs on export controls (e.g., Wassenaar) would continue to exist, similarly to IAEA and NPT.</li> </ul>
<b>Non-profit NSAs</b>	<p><b>Cities and sub-state authorities:</b></p> <ul style="list-style-type: none"> <li>Most climate action takes place at the local level.</li> </ul> <p><b>NGOs, activist groups, grassroots movements:</b></p> <ul style="list-style-type: none"> <li>Retain legitimacy and popular support.</li> <li>Less focus on climate justice issues in Global North.</li> <li>More localized and narrow, not as transnational, or broad.</li> <li>Geographical bias (North-South) persists.</li> <li>Limited economic and coercive power.</li> <li>No authority.</li> </ul> <p><b>Epistemic communities:</b></p>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>No significant role for civil society organizations (SCOs) as little institutionalized mechanisms for civil society participation exist.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>NGOs in Global South demanding more inclusive and transparent access to development finance.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Humanitarian organizations for the defence/assistance of migrants and refugees more vocal and active as increased migration flows and securitization of borders lead to higher deaths, especially in the Mediterranean.</li> <li>Due to centralization, sub-state authorities do not play an important role.</li> </ul>

	<ul style="list-style-type: none"> <li>Engaged scientists still form transborder epistemic communities to highlight the state of climate change and climate science.</li> </ul>			
<b>For profit NSAs</b>	<b>Private sector:</b> <ul style="list-style-type: none"> <li>Sector-specific initiatives for adaptation.</li> <li>Race to the bottom in sustainability standards.</li> <li>Decrease in PPPs.</li> <li>Oil companies maintain influence and decrease ambitions of decarbonization plans.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Decrease in public-private cooperation. No emphasis on PPPs.</li> <li>Digital corporations are reigned in.</li> <li>Spread of cryptocurrencies.</li> <li>Shadow banking sector expands.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>MNEs face new barriers when operating transnationally.</li> <li>Emergence of national champions.</li> <li>Increased role of private sector to compensate for limited cooperation at the international level.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>No new corporate responsibility standards, and existing voluntary standards crumble.</li> </ul> <b>Private military and security companies (PMSCs):</b> <ul style="list-style-type: none"> <li>Increase in relevance.</li> <li>Involved in combat support, convoy, personal and facility security, advice and training, combat...</li> <li>Highly sophisticated drones and other robotized forms of warfare become important.</li> <li>Securitization of technology.</li> </ul> <b>Private security actors involved in 'migration management':</b> <ul style="list-style-type: none"> <li>Securitization of migration leads to increased involvement of private actors in border control, surveillance, biometric data gathering and processing...</li> </ul>
<b>Overall</b>	<ul style="list-style-type: none"> <li>Regression.</li> <li>Very little climate action, mainly at the local and regional levels.</li> <li>Fragmented, state-centred.</li> <li>UNFCCC and PA no longer central nodes.</li> <li>Emissions continue to rise.</li> </ul>	<ul style="list-style-type: none"> <li>From fragmented, networked architecture centred on the G20 and FSB, to two separate, informal regimes in each sphere.</li> <li>Overall, remains highly informal, fragmented, and minilateral.</li> <li>Strong functional differentiation. International monetary regime, banking, securities and</li> </ul>	<ul style="list-style-type: none"> <li>Two rival blocs in trade and investment.</li> <li>Rise of economic nationalism, protectionism, and protection of national champions.</li> <li>Preference for bilateral or regional agreements.</li> </ul>	<ul style="list-style-type: none"> <li>States as the central actors.</li> <li>Cybersecurity emerges as central issue – 2 separate, bloc-regulated internets. Cyberattacks and hacks abound.</li> <li>Little/no collaboration on terrorism between blocs or even between countries,</li> </ul>

	<ul style="list-style-type: none"> <li>• Regulatory races to the bottom.</li> <li>• Effects of climate change deepen the North-South divide, with Southern countries more concerned with climate justice.</li> <li>• CBDR is questioned.</li> <li>• Focus on adaptation (short-term focus), some mitigation and no Loss and Damage (L&amp;D) (although Global South makes demands for L&amp;D).</li> <li>• Displacement in countries with major coastal populations.</li> <li>• Rise in the number of climate refugees.</li> <li>• Transnational climate initiatives break down.</li> </ul>	<p>insurance, and accounting and auditing standards are governed in silos.</p> <ul style="list-style-type: none"> <li>• US sphere is US-dollar-centred.</li> <li>• Chinese sphere is RMB-centred.</li> <li>• Post-2008 reforms stagnated.</li> <li>• Regulatory race to the bottom.</li> <li>• Regime reacting to crises, rather than preventing them.</li> <li>• Focus on traditional micro prudential regulations (idiosyncratic risk) rather than macroprudential regulation (systemic risk).</li> <li>• Expansion of China's Bilateral Swap Arrangements (strengthen position of China as a lender in crisis situations).</li> </ul>	<ul style="list-style-type: none"> <li>• Preference for informal/less institutionalized fora.</li> <li>• Decreasing cross-cutting issue convergence between trade and development.</li> <li>• Vaccine nationalism.</li> <li>• Restrictions of FDI, foreign asset ownership controls.</li> <li>• Weakened development institutions.</li> <li>• Patron-client relationships.</li> <li>• Normalization of trade wars and instrumentalization of trade as a foreign policy tool.</li> <li>• No global mechanism for dispute settlement.</li> <li>• Disruptions in global value chains.</li> <li>• No convergence across RTAs.</li> </ul>	<p>due to differing understandings of the concept of terrorism.</p> <ul style="list-style-type: none"> <li>• Securitization of migration, increased relevance of migration management.</li> <li>• Internally, security of racialized minorities and far-right extremism as a challenge due to increase in nativist attitudes.</li> <li>• Neglect of human security angle.</li> <li>• Increased attention to informal configurations, ad hoc coalitions, bilateral cooperation.</li> <li>• Tension between legitimacy and authority of security institutions.</li> <li>• Restrictions of fundamental rights due to expansion of state powers.</li> <li>• Surveillance and censorship.</li> <li>• Policies of "rally around the flag".</li> <li>• 'Internet sovereignty' (Budnistky &amp; Jia, 2018).</li> </ul>
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## Global governance matrix for Shifting

	Climate	Finance	Trade and development	Security
Global FIGOs	<b>Overall:</b> <ul style="list-style-type: none"> <li>Limited trust and strength of IOs, weak authority.</li> </ul> <b>UNFCCC:</b> <ul style="list-style-type: none"> <li>The UNFCCC does muddle along but without much real traction in terms of compliance and implementation of Paris Agreement.</li> <li>Loss of leadership by key states leads to deceleration of progress in negotiations and implementation.</li> <li>NDCs do not increase in ambition.</li> <li>Progress is rhetorical rather than factual.</li> <li>Loses authority.</li> </ul> <b>Intergovernmental Panel on Climate Change (IPCC):</b> <ul style="list-style-type: none"> <li>Low authority and legitimacy.</li> <li>Has to produce politically acceptable results.</li> <li>Difficult relation with US and fossil fuel exporters.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Traditional institutions retain important position globally and increase linkages/coordination between them. <ul style="list-style-type: none"> <li>Banking → BIS</li> <li>Securities → IOSCO</li> <li>Insurance → IAIS</li> <li>Pensions → IOPS</li> </ul> </li> </ul> <b>Bank for International Settlements (BIS):</b> <ul style="list-style-type: none"> <li>Main institution for banking regulation, information sharing for central banks, lending to central banks...</li> <li>Remains highly exclusive.</li> <li>High influence of EU, US, G10.</li> <li>China remains engaged in institution.</li> <li>Basel IV goes through.</li> </ul> <b>International Monetary Fund (IMF):</b> <ul style="list-style-type: none"> <li>Retains important position.</li> <li>Faces legitimacy issues, particularly from the perspective of the Global South.</li> <li>No institutional reforms. <ul style="list-style-type: none"> <li>Inability to incorporate concerns from emerging powers/Southern countries.</li> </ul> </li> <li>Resource constraints and debates over country contributions.</li> </ul>	<b>World Trade Organization (WTO):</b> <ul style="list-style-type: none"> <li>Conflict over Appellate Body unresolved. No dispute resolution.</li> <li>Less activity, narrow scope.</li> <li>Paralysis.</li> </ul> <b>World Bank (WB):</b> <ul style="list-style-type: none"> <li>Again, dominant but facing budget pressures and disputes over institutional structure.</li> <li>Less competition from NDB, AIIB, though still challenged by them.</li> <li>Losses ground to the regional development banks that are nimbler with the needs of their regions and maybe find it easier to evolve their governance.</li> <li>Green finance loses importance.</li> </ul> <b>New Development Bank (NDB):</b> <ul style="list-style-type: none"> <li>Slow expansion of activities and still plays minor role.</li> <li>Budget pressures as a result from Chinese financial crisis (largest contributor).</li> </ul>	<b>United Nations Security Council (UNSC):</b> <ul style="list-style-type: none"> <li>Not reformed.</li> <li>Deadlocked.</li> <li>UN underfunded and weakened in general. Rendered useless.</li> <li>Even though there are no clear blocs, China and US veto or threaten to veto UNSC resolutions constantly.</li> <li>Inaction and low legitimacy.</li> </ul> <b>International Atomic Energy Agency (IAEA) and Non-proliferation Treaty (NPT):</b> <ul style="list-style-type: none"> <li>IAEA/NPT remain central, but some countries exit or threaten to exit the agreement.</li> <li>Threatened by NSAs and rogue states.</li> </ul> <b>International Criminal Court (ICC):</b> <ul style="list-style-type: none"> <li>Increasing disagreements between states and decreasing interest in global institutions leaves very little scope for the ICC.</li> </ul>

		<ul style="list-style-type: none"> <li>Possible IMF reforms in the context of Chinese financial crisis and COVID-19 (Gallagher et al., 2021): <ul style="list-style-type: none"> <li>Improved access and funding for the emergency facilities – the Rapid Financing Instrument (RFI) and Rapid Credit Facility (RCF).</li> </ul> </li> </ul>		
<b>Regional FIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Southern regions question the C in the CBDR principle, demand more ambition and resources from Global North.</li> <li>Greater N/S divide.</li> <li>Weak regional action on climate change. More focus on other areas such as security.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Remains climate leader, but ambitions not scaled up.</li> <li>Serious questions over financing of green transition.</li> <li>Divergence in MS over progress towards 2030 targets, with quite a few MS falling substantially behind.</li> <li>2030 targets overall are not met.</li> <li>Commission has little authority and legitimacy to enforce climate policy.</li> <li>Emergence of climate negationist authoritarian governments in some MS.</li> <li>Vocal constituencies.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Heterogeneous regional financial arrangements that evolve separately with limited linkages/coordination between them (e.g., bifurcated regional swap arrangements persist).</li> <li>Mostly technocratic cooperation.</li> <li>COVID-19 points to importance of strengthening multi-layered global financial safety net with stronger cooperation among the different layers of the global financial safety net (Gallagher et al., 2021):</li> <li>Possible developments: increase in the resources and geographic coverage of RFAs.</li> </ul> <p><b>United States (US):</b></p> <ul style="list-style-type: none"> <li>Swap lines of the Federal Reserve expanded.</li> </ul> <p><b>European Union (EU):</b></p>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>No convergence between RTAs, regional agreements do not connect.</li> <li>Regionalization and compartmentalization of trade.</li> <li>Preference for bilateral agreements.</li> <li>RCEP and CTPP scrapped.</li> </ul> <p><b>Asian Infrastructure Development Bank (AIIB):</b></p> <ul style="list-style-type: none"> <li>Plays a limited role, fewer competences.</li> <li>Budget pressures as a result from Chinese financial crisis.</li> <li>Focus on infrastructure financing.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Disputes arise, particularly around national champions.</li> <li>Single Market suffers some setbacks.</li> <li>N/S MS differences amplified by effects of COVID-19 (Bernes, 2020; Sokol &amp; Pataccini, 2020).</li> </ul>	<p><b>Shanghai Cooperation Organization (SCO):</b></p> <ul style="list-style-type: none"> <li>Limited influence/authority/prominence.</li> <li>China and Russia strategic alliance to counter US influence and maintain stability in neighbourhood (Pradhan &amp; Mohanty, 2021).</li> <li>Importance of Central Asia for Russia and China (Korosteleva &amp; Petrova, 2020).</li> <li>Unclear role for India.</li> <li>Combatting terrorism and separatism.</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>Disputes over South China Sea remain with US disengagement.</li> <li>China insistence on bilateral talks.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Populism, Euroscepticism, and authoritarianism as internal challenges.</li> </ul>



	<ul style="list-style-type: none"> <li>• Due to additional pressure from the adoption of smart manufacturing technologies, there are tensions over job losses.</li> <li>• No focus on environmental justice.</li> <li>• Focus on adaptation and mitigation.</li> </ul> <p><b>African Union</b></p> <ul style="list-style-type: none"> <li>• Finance for adaptation as major challenge.</li> <li>• High adaptation costs and already suffering from the effects of climate change.</li> </ul>	<ul style="list-style-type: none"> <li>• Retains central position in global financial governance (GFG).</li> <li>• Further formalization of framework within the EU.</li> <li>• Development of European Emergency Financial Stability Mechanisms.</li> </ul> <p><b>ASEAN</b></p> <ul style="list-style-type: none"> <li>• Chiang Mai Initiative Multilateralization (CMIM) not delinked from IMF, activated for the first time.</li> <li>• Improves cooperation with IMF in terms of exchange of information, policy conditionality, repayment schedules...</li> <li>• Improves coordination with Macroeconomic Research Office (AMRO) (Grimes &amp; Kring, 2020; Henning, 2006). <ul style="list-style-type: none"> <li>◦ AMRO expands budget.</li> <li>◦ Increased interactions with ADB, IMF and other key external partners for information sharing, technical assistance, training, joint meetings...</li> <li>◦ Development of autonomy and expansion of surveillance and economic analysis capabilities.</li> </ul> </li> </ul> <p><b>Latin America</b></p>	<p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Some Regional Economic Communities (RECs) deepen ties (Parshotam, 2018).</li> <li>• Some progress in African Continental Free Trade Area (AfCFTA), albeit slow (Parshotam, 2018).</li> <li>• Maintain Agenda 2063 focus on intra-regional trade (Parshotam, 2018).</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>• ASEAN remains intergovernmental (talk-shop).</li> <li>• No incentive towards further integration/progress on Single Market.</li> <li>• US disengagement damages autonomy and relevance of ASEAN.</li> </ul>	<ul style="list-style-type: none"> <li>• EU Joint Cyber Security Unit highly relevant.</li> </ul> <p><b>NATO:</b></p> <ul style="list-style-type: none"> <li>• NATO exists in name but is weakened by US disengagement.</li> <li>• Loses Turkey as a member, and the organization fades into near irrelevance.</li> <li>• EU does not become much more integrated in terms of CSDP.</li> <li>• Sweden and Ukraine express an interest in joining NATO, but the bid is not accepted due to the direct threat posed by Russia. Sweden can rely on the EU's mutual defence clause, but Ukraine is vulnerable and Putin (still in power) takes advantage by annexing the Donbass.</li> </ul> <p><b>Economic Community of West African States (ECOWAS):</b></p> <ul style="list-style-type: none"> <li>• Important for countering cross-border terrorism in the Sahel and West Africa, caused by internal instability in many of these countries.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Increases its engagement in conflict prevention, mediation, resolution.</li> </ul>
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		<ul style="list-style-type: none"> <li>FLAR remains delinked from IMF (Henning, 2006).</li> </ul>		
<b>IIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Informalization of the climate process as UNFCCC becomes more irrelevant.</li> <li>Coalitions of willing states working on particular energy technologies and mitigation solutions.</li> <li>Technology drives informal protocols, self-regulation.</li> </ul> <p><b>Ministerial on Climate Action:</b></p> <ul style="list-style-type: none"> <li>Stops meeting.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Informal institutions remain the main game in financial governance.</li> </ul> <p><b>G20:</b></p> <ul style="list-style-type: none"> <li>Remains at the core of GFG (Zhang, 2020) with FSB but in a weakened position, facing legitimacy issues</li> </ul> <p><b>Financial Stability Board (FSB):</b></p> <ul style="list-style-type: none"> <li>Organizational structure not reformed.</li> <li>China remains engaged with this institution.</li> <li>Main IIGO for coordination on financial issues.</li> <li>More coordination between issue areas and regions (though still limited).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>More prominent role for G7/8/20 in general.</li> <li>Bilateral agreements proliferate.</li> </ul> <p><b>BRICS:</b></p> <ul style="list-style-type: none"> <li>No push for institutionalization.</li> <li>Narrow cooperation, focus on economic and trade issues.</li> <li>Uneasy relationship between China and India.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Informal IOs are the predominant form of organization.</li> <li>Coalitions of like-minded countries are formed on an ad-hoc basis and tend to follow the G20 model, where non-democratic countries are also included.</li> <li>G3s and G5s established along regional lines.</li> <li>Minilateral groupings: <ul style="list-style-type: none"> <li>Issue-based, very specific interest and mandate.</li> <li>Among likeminded countries, with similar interests, priorities, and definitions.</li> <li>More flexible than traditional alliances – better suited for a changing world.</li> </ul> </li> <li>New IIGO(s) develop to address NSA and rogue state control of drones and semi-autonomous weapons.</li> <li>As the number of cyber-attacks rises, some IIGOs are created to increase information-sharing efforts – particularly on the role of NSAs – to boost cybersecurity.</li> </ul> <p><b>P5+1:</b></p> <ul style="list-style-type: none"> <li>Is still functional but given the fluidity that characterizes</li> </ul>

				international coalitions, it may include other countries.
<b>Non-profit NSAs</b>	<p><b>Trade unions:</b></p> <ul style="list-style-type: none"> <li>Due to combined pressure of widespread smart manufacturing technologies, productivity gains not being spread evenly, retrenchment of the state, and the loss of some jobs due to decarbonization efforts in some countries without adequate efforts to achieve a just transition, trade unions are active in lobbying against green transition.</li> <li>National strikes are common.</li> </ul> <p><b>Coalitions of Indigenous Peoples from Global South + Canada/New Zealand/US/Australia:</b></p> <ul style="list-style-type: none"> <li>Slow progress towards climate action, land grabs in the Global South, pipeline projects through Indigenous territories spark fierce resistance.</li> <li>They remain excluded from climate talks and resort to more radical action.</li> </ul> <p><b>NGOs:</b></p> <ul style="list-style-type: none"> <li>Retain legitimacy and popular support.</li> <li>Limited authority/coercive power.</li> <li>Low resources.</li> </ul> <p><b>Social movements:</b></p> <ul style="list-style-type: none"> <li>Less institutionalized and more radical movements such as Extinction Rebellion.</li> </ul>	<p><b>Social movements:</b></p> <ul style="list-style-type: none"> <li>Conflicts over rising inequality spark protests against financial elites.</li> <li>Radical social movements such as Occupy Wall Street and 15M gain greater relevance.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Repression/surveillance reduce possibilities for institutionalized civil society participation.</li> <li>No significant role for civil society.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Repression/surveillance reduce possibilities for institutionalized civil society participation.</li> <li>Anti-systemic movements emerge.</li> <li>Violent protests met with further state repression.</li> <li>Democratic backsliding, populism and economic downturn encourage rise of the far-right. <ul style="list-style-type: none"> <li>Transnational far right alliances.</li> </ul> </li> <li>Emergence of important non-state actors (warlords, etc) in areas of conflict.</li> </ul>

	<ul style="list-style-type: none"> <li>• Cyber hacks on high-emitting industries.</li> </ul> <p><b>Cities and sub-state authorities:</b></p> <ul style="list-style-type: none"> <li>• Cities and regions demand more action but lack authority and legitimacy to implement measures due to recentralization of powers.</li> </ul>			
<b>For profit NSAs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Manufacturing tech becomes widespread. <ul style="list-style-type: none"> <li>◦ Higher difficulty for Southern nations to adopt sustainable technology and lack of technology transfers from Northern countries deepens N/S divide.</li> </ul> </li> <li>• Technological innovation drives a slow transition, well below what is necessary.</li> <li>• Lowest common denominator in sustainability standards.</li> <li>• Self-regulation.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Regulation of cryptocurrencies.</li> <li>• Conventional financial actors retain major share of services.</li> <li>• Shadow banking sector regulated.</li> </ul>	<p><b>MNEs:</b></p> <ul style="list-style-type: none"> <li>• The spread of manufacturing technologies gives renewed relevance to MNEs.</li> <li>• Development of private regulation.</li> <li>• Re-shoring efforts.</li> </ul>	<p><b>Private military and security companies (PMSCs):</b></p> <ul style="list-style-type: none"> <li>• Increase in relevance.</li> <li>• Failed states abound and PMSCs take advantage of the chaos to seize control of critical energy sources (oil fields in the MENA region, etc).</li> <li>• Widespread unrest, violent protests, and conflicts in many countries lead governments to rely on private security providers.</li> <li>• Highly sophisticated drones and other robotized forms of warfare would become important.</li> </ul>
<b>Overall</b>	<ul style="list-style-type: none"> <li>• Climate governance barely stays together.</li> <li>• Little action at the multilateral level.</li> <li>• Progress is mostly rhetorical.</li> <li>• Focus on adaptation.</li> <li>• Some focus on and mitigation, but well below what is necessary for the 2 °C limit.</li> <li>• Sharp N/S divide over climate action.</li> <li>• Climate refugees on the rise.</li> </ul>	<ul style="list-style-type: none"> <li>• FSB, G20 and BIS remain at the core of global financial governance (Zhang, 2020)</li> <li>• Declining legitimacy of architectural core.</li> <li>• Lack of substantial reforms at the global level, though there is progress regionally.</li> <li>• EU/US leading positions in architectural cores of GFG (Zhang, 2020),</li> <li>• China remains a policy consumer instead of policy contributor.</li> </ul>	<ul style="list-style-type: none"> <li>• Trade stagnates.</li> <li>• Bretton Woods institutions remain central, but still face legitimacy issues, are challenged by new institutions such as NDB, and are affected by US disengagement.</li> <li>• Intra-regional flows increase.</li> <li>• Slow compression of supply chains.</li> <li>• Re-shoring dynamics.</li> <li>• Regionalization/compartimentalization of trade.</li> </ul>	<ul style="list-style-type: none"> <li>• State-centred.</li> <li>• Volatile, unstable (alliances), extremely uncertain.</li> <li>• Main challenges: <ul style="list-style-type: none"> <li>◦ Cyberattacks.</li> <li>◦ NSAs such as warlords.</li> <li>◦ Social unrest.</li> <li>◦ Rogue states.</li> <li>◦ Rise of authoritarianism and the far right.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Technology drives transition.</li> <li>• UNFCCC and sub-state authorities/civil society lose authority and legitimacy.</li> <li>• Less hybridization of governance due to lower inclusion of civil society actors and subnational authorities, though private sector remains involved.</li> </ul>	<ul style="list-style-type: none"> <li>◦ <b>China</b> excluded from architectural core.</li> <li>• Financial crisis in China provides impetus for cooperation at a technocratic level.</li> <li>• Overall, still functional differentiation but more coordination between issue areas and regions.</li> <li>• Remains minilateral and informal, but less fragmented.</li> <li>• Post-2008 reforms endure.</li> <li>• Trends:             <ul style="list-style-type: none"> <li>◦ Hybridization: incorporation of NSAs such as financial firms and other private actors.</li> <li>◦ Informalization (G20 remains key actor).</li> <li>◦ Less fragmentation.</li> <li>◦ More attention to macroprudential regulation (systemic risk), not just micro prudential (idiosyncratic risk).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Patchwork of bilateral arrangements.</li> <li>• Distrust of multilateral approaches.</li> <li>• No convergence across RTAs.</li> <li>• No dispute resolution mechanism.</li> <li>• Some protectionist measures and support for national champions.</li> <li>• Weaponization of trade, occasional trade wars.</li> <li>• Short-term focus in investment has affected green initiatives and decarbonization.</li> </ul>	<ul style="list-style-type: none"> <li>• Preference for minilateral cooperation on specific issues.</li> <li>• Progressively more fragmented and lacking cohesion.</li> <li>• Human security angle neglected.</li> <li>• In countries where autocratic governments/strongmen arise, there is a redefinition of terrorism, conflated with protestors.</li> <li>• Arms races.</li> <li>• Russia – China military cooperation.             <ul style="list-style-type: none"> <li>◦ Tensions arise due to economic asymmetry between Russia and China (Lukin, 2020).</li> </ul> </li> <li>• Authoritarianism on the rise and increased number of cyberattacks.             <ul style="list-style-type: none"> <li>◦ More countries are willing to support China and Russia's vision of cyber-sovereignty (Budnitsky &amp; Jia, 2018).</li> <li>◦ More fragmented cyber space.</li> </ul> </li> <li>• Little role for the ICC.</li> </ul>
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## Global governance matrix for Rising

	Climate	Finance	Trade and development	Security
<b>Global FIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Big legalized intergovernmental forums becoming increasingly relevant again.</li> </ul> <p><b>UNFCCC:</b></p> <ul style="list-style-type: none"> <li>US-CHI tandem driving forward cooperation.</li> <li>PA ratchet mechanism working as intended.</li> <li>Less state centred.</li> <li>Hybridization: institutionalized inclusion of NSAs and sub-state authorities, particularly MNEs, energy companies...</li> <li>Cities and companies submit NDCs.</li> <li>CBDR remains a contentious issue, with developing countries struggling. High-income states increasingly engage in technology transfers.</li> </ul> <p><b>Energy technology-based IOs:</b></p> <ul style="list-style-type: none"> <li>With climate action at the top of the agenda, states increasingly create specific IOs dealing with specific energy technologies that can help with abatement. These largely remain at the level of best practice and</li> </ul>	<p><b>Bank for International Settlements (BIS):</b></p> <ul style="list-style-type: none"> <li>Remains key player in GFG (Zhang, 2020).</li> <li>Modest Basel IV agreement.</li> </ul> <p><b>International Monetary Fund (IMF):</b></p> <ul style="list-style-type: none"> <li>Loses authority and legitimacy due to need for deep institutional reforms but manages to stay together.</li> <li>Resource constraints.</li> <li>Alternative insurance mechanisms for developing countries. <ul style="list-style-type: none"> <li>Reserves.</li> <li>Regional coinsurance facilities.</li> <li>Counter-cyclical sources of foreign exchange.</li> </ul> </li> </ul>	<p><b>World Trade Organization (WTO):</b></p> <ul style="list-style-type: none"> <li>Reformed, with limited success.</li> <li>Dominated by major players.</li> </ul> <p><b>World Bank:</b></p> <ul style="list-style-type: none"> <li>Competes with Asian Infrastructure Investment Bank (AIIB).</li> <li>Faces budgetary pressures.</li> <li>Loses authority and legitimacy.</li> <li>No institutional reform.</li> <li>Increasingly marginalized due to the rise of private finance.</li> <li>Substituted by 'ad hoc' issue oriented and geographically focused institutions.</li> </ul> <p><b>New Development Bank (NDB):</b></p> <ul style="list-style-type: none"> <li>Rapid growth of some BRICS countries (e.g., China, India) leads to expanded activities of NDB.</li> <li>Legitimacy from the perspective of Global South. <ul style="list-style-type: none"> <li>Lending in local currencies.</li> <li>No conditionality.</li> </ul> </li> <li>Finances politically motivated projects.</li> </ul>	<p><b>United Nations (UN):</b></p> <ul style="list-style-type: none"> <li>The UN plays an important role, especially in areas connected to public health.</li> <li>The WHO's reinforced position is translated into a greater role in security matters. Health is securitized.</li> <li>The UNSC acquires a greater role because of the prevalence of intra-state conflicts and good relations between superpowers.</li> <li>The use of the veto is not prevalent although the trends towards democratization cause occasional fears in Russia and China.</li> <li>No regime change is sponsored by the great powers.</li> <li>UNSC still not representative and has legitimacy issues.</li> <li>Failed oil-producing states degenerate into zones of civil conflict and remain high on the UNSC's agenda.</li> </ul> <p><b>Non-Proliferation Treaty (NPT):</b></p> <ul style="list-style-type: none"> <li>Still in place but threatened by NSAs in conflict areas.</li> <li>Pillar of disarmament finally gains traction due to US-CHI cooperation. Stocks decrease M</li> </ul>



	info-sharing, although some investment-gathering initiatives are included.			
<b>Regional IGOs</b>	<p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Given growth in EU, more credibility.</li> <li>Leadership position.</li> <li>Focus on technological development rather than political solutions.</li> <li>No Loss &amp; Damage.</li> <li>Limited just transition framework.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>Focus on adaptation, but finance is a challenge.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Separate regional orders, with increasing linkages/coordination between them, and progressing in terms of institutionalization.</li> <li>RFAs continue to evolve.</li> <li>More integration of swap networks (Transatlantic and Asia)</li> <li>Regional differences converging to some degree.</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>Chiang Mai Initiative Multilateralization (CMIM) → <b>delinked from IMF/or delinked portion increases</b> (Grimes &amp; Kring, 2020; Henning, 2006) <ul style="list-style-type: none"> <li>Macroeconomic Research Office (AMRO) and CMIM combined into unified institution (Henning, 2006).</li> <li>Reserves pooled into single account (Henning, 2006).</li> <li>Obtains more resources and authority, improves surveillance and economic analysis capabilities (Henning, 2006).</li> </ul> </li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Much more integrated, developed, and formal framework.</li> <li>Progress towards a European Monetary Fund.</li> </ul> <p><b>Latin America:</b></p>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>China more assertive role through regional institutions such as the AIIB.</li> <li>Focus on development of BRI (Southeast Asia/Eurasia).</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Single Market remains intact.</li> </ul> <p><b>ASEAN:</b></p> <ul style="list-style-type: none"> <li>Less prominent role for ASEAN but more room for hedging between major powers.</li> <li>Slow progress towards Single Market.</li> <li>Remains non-institutionalized.</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>Benefits from offshoring dynamics.</li> <li>Reverts focus on intra-regional trade (Agenda 2063).</li> <li>Difficulty dealing with big corporations, especially digital corporations.</li> </ul> <p><b>Asian Infrastructure Investment Bank (AIIB):</b></p> <ul style="list-style-type: none"> <li>Expands scope of activities beyond infrastructure financing.</li> <li>Competes with WB and private finance.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Regional cybersecurity efforts. <ul style="list-style-type: none"> <li>Supported by large digital corporations.</li> </ul> </li> <li>EU Joint Cyber Security Unit obtains more resources and authority.</li> </ul> <p><b>Shanghai Cooperation Organization (SCO):</b></p> <ul style="list-style-type: none"> <li>Gains relevance.</li> <li>Difficult relationship China – India.</li> <li>Maintain Chinese influence in Central Asia (Pradhan &amp; Mohanty, 2021).</li> <li>More countries consider joining China' security sphere.</li> <li>Combating terrorism and separatism (on the rise) (Pradhan &amp; Mohanty, 2021).</li> </ul> <p><b>NATO:</b></p> <ul style="list-style-type: none"> <li>Stays relevant as long as Russia is still a threat.</li> <li>Perception of China as a threat lessened.</li> <li>Frictions due to defence spending lessened. <ul style="list-style-type: none"> <li>No domestic pressures to reduce spending.</li> <li>US seems content with the status quo given that it faces no clear</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>The Latin American Reserve Fund (FLAR) increases reserves and expands membership (e.g., Argentina, Mexico).</li> </ul>	<ul style="list-style-type: none"> <li>AIIB supporting expansion of Belt and Road Initiative.</li> </ul>	<p>confrontations and doesn't contemplate large-scale foreign interventions.</p> <ul style="list-style-type: none"> <li>Dealing with peripheral conflicts, particularly civil conflicts in failed oil-producing states (e.g. Libya).</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Migration and refugees due to conflicts in Southern neighbourhood.</li> <li>Important role for FRONTEX and European Asylum Support Office (EASO).</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>Faces a barrage of civil conflicts in its region. However, the strong development of some of the SSA countries increases funds and options to send in missions for conflict prevention, resolution, stabilization, often in cooperation with the UN M</li> </ul>
<b>IIGOs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Transnational informal organizations lead in regulation.</li> <li>Self-regulation: private law becomes more binding, leads to hollowing out of public law (replaced by informal private law).</li> <li>Rating agencies gain relevance.</li> <li>G7/8/20 and similar fora heavily active on climate issues, multiple</li> </ul>	<p><b>Financial Stability Board (FSB):</b></p> <ul style="list-style-type: none"> <li>Remains key player in GFG (Zhang, 2020)</li> <li>Reduction in functional differentiation through strengthening of the Financial Stability Board.</li> <li>Coordination function between regions.</li> </ul>	<p><b>BRICS:</b></p> <ul style="list-style-type: none"> <li>Remains informal, non-institutionalized.</li> <li>Influence of India growing.</li> <li>Focus on productivity gains, value addition, and early adoption of manufacturing tech.</li> <li>Tensions between China and India (competition in other regions, border disputes).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Ad-hoc international contact groups related to particular conflicts are formed depending on the issue and include both democratic and non-democratic countries.</li> <li>Export controls IIGOs remain in place.</li> <li>As the number of cyberattacks increase, IIGOs develop for information-sharing on NSA sources of these attacks. However, effectiveness is limited.</li> </ul>

	declarations and pledge to phase out FF subsidies, etc M			<b>P5+1:</b> <ul style="list-style-type: none"> <li>Remains relevant as all its members see a continued interest in preventing nuclear proliferation. No similar initiatives are launched, as the Iran situation remains under control and no other states pursue nuclear weapons.</li> </ul>
<b>Non-profit NSAs</b>	<b>Cities and sub-state authorities:</b> <ul style="list-style-type: none"> <li>Strong role for sub-state authorities, particularly megacities, and networks of these cities.</li> <li>Taking roles beyond implementation (policies for adaptation/mitigation).</li> <li>Bottom-up experimentation.</li> </ul> <b>NGOs:</b> <ul style="list-style-type: none"> <li>Coordination role for non-state public actors.</li> <li>Standards monitoring.</li> <li>Stimulating activism through social media.</li> <li><b>Wildcard:</b> NGOs start naming and shaming campaigns on individuals', states' and companies' emissions profiles (based on the fact that privacy controls are lax in this world).</li> </ul> <b>Social movements and civil society:</b> <ul style="list-style-type: none"> <li>Local community (special professionals,</li> </ul>	<b>Social movements and civil society:</b> <ul style="list-style-type: none"> <li>Movements against excessive control of digital companies.</li> <li>Growing discontent with rising inequality and financial elites.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Private philanthropy as an important source of funding for development.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Sub-national level acquires greater prominence, especially through the rise of megacities. <ul style="list-style-type: none"> <li>Networks of cities arguing for human security approach.</li> <li>Perhaps more involvement in counterterrorism.</li> </ul> </li> <li>Sub-national authorities and cities collaborate on counterterrorism.</li> <li>CSOs would carry the burden of post-conflict reconstruction.</li> <li>Terrorism organizations on the rise as discontent rises along with domestic economic inequality.</li> </ul>

	<p>epistemic expert networks) plays an important role.</p> <ul style="list-style-type: none"> <li>• Social media is an important tool.</li> </ul> <p><b>Trade unions:</b></p> <ul style="list-style-type: none"> <li>• Vocal against energy transition and automation.</li> </ul>			
<b>For profit NSAs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• High relevance of the private sector, particularly MNEs (privatization, private law, international private treaties...).</li> <li>• <b>Big firms</b> in the form of <b>consortiums</b> (local and foreign private companies).</li> <li>• Big tech firms become highly involved in devising new or improved energy technologies for mitigation and create PPPs to push these technologies forward, both in terms of R&amp;D as well as standard-setting and market creation.</li> <li>• Big tech firms provide data services so that countries can optimally design and implement their adaptation strategies.</li> <li>• Private sector drives transition.</li> <li>• Oligopolistic energy companies.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Non-financial companies and fintech actors acquire a greater role in capital markets.</li> <li>• High involvement of private sector: “privatization of transnational regulation”, the expansion of “webs of governance”, “epistemic communities”, and “multi-level governance” involving government and private sectors and civil associations.</li> <li>• Digital companies capable of escaping/dictating regulation.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Digital empires engage in unfair practices, data colonialism...</li> <li>• Private sector increases participation and influence in development institutions. Involved in large-scale development projects.</li> <li>• Increased role of non-state actors (corporate diplomacy); private governance.</li> <li>• Pharmaceutical and medical companies are powerful.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>• Private security contractors boom because some states outsource their policing to them, in this era of lax regulation and general trend towards more corporate-led governance.</li> <li>• Excessive power of digital empires a concern.</li> <li>• GAFA coordination, involvement in self-regulation of some weaponry (e.g., lethal autonomous weapons).</li> <li>• GAFA collaborate to auto-regulate in preventing terrorist acts that use their platforms.</li> </ul>

	<ul style="list-style-type: none"> <li>○ Purchase vast amounts of land in Global South (land grab) for RE development.</li> <li>• Private sector involved in reskilling efforts.</li> </ul>			
<b>Overall</b>	<ul style="list-style-type: none"> <li>• Ecological transition largely driven by the techno-fix utopia.</li> <li>• Transition driven by private sector leaders and US-CHI tandem.</li> <li>• Strong role for megacities.</li> <li>• High economic growth and increases in energy demand due to manufacturing technology being widespread; this is compensated through improvements in energy efficiency and widespread deployment of RE.</li> <li>• Geopolitical competition (critical minerals for the transition).</li> </ul>	<ul style="list-style-type: none"> <li>• Core still FSB, IMF, BIS, G20.</li> <li>• Development of RFAs.</li> <li>• Institutionalization progress but remains informal overall.</li> <li>• Still minilateral.</li> <li>• Less fragmented.</li> <li>• Hybridization: further inclusion of private actors.</li> <li>• Strong functional differentiation persists but there is more coordination between these functions and between regions.</li> <li>• Stronger cooperation between the different layers of the GFSN.</li> <li>• Stronger role for private actors → networked architecture.</li> </ul>	<ul style="list-style-type: none"> <li>• Uneven digital globalization (Schilirò, 2020).</li> <li>• Multilateralism.</li> <li>• Renewed off-shoring dynamics.</li> <li>• Free trade.</li> <li>• Hybridization: inclusion of for profit NSAs.</li> <li>• Decrease in intra-regional trade.</li> <li>• Increase in extra-regional trade.</li> <li>• Development assistance reoriented towards supporting fragile states.</li> <li>• Privatization of development.</li> <li>• New issue: data colonialism.</li> <li>• Disaster relief and post-catastrophe as main areas for development.</li> </ul>	<ul style="list-style-type: none"> <li>• States retain much of their importance, but global corporations acquire outsized prominence.</li> <li>• Some big tech companies start exploring the defence business.</li> <li>• Terrorism: military strategies are still favoured instead of comprehensive approaches that consider the needs of the local population.</li> <li>• No global framework for cybersecurity.</li> <li>• Superpowers reach some basic, informal understandings regarding cyber warfare, but they still exploit their capabilities in this realm to destabilize minor powers.</li> <li>• Export controls of dual use technology.</li> <li>• Highly unstable.</li> </ul>

## Global governance matrix for Flowing

	Climate	Finance	Trade and development	Security
<b>Global FIGOs</b>	<p><b>UNFCCC:</b></p> <ul style="list-style-type: none"> <li>Remains at the core of global climate governance.</li> <li>Agreement improved in subsequent COP discussions.</li> <li>The rulebook for the PA is fully agreed upon after a number of years, and after the first global stocktake, the dismal maths make it clear that much more mitigation and adaptation ambition is necessary. The next round of NDCs is much more ambitious and although the 1.5 target is no longer attainable, 2 degrees appears in sight.</li> <li>A separate UNFCCC agreement, specifically on adaptation, is reached. It involves info-sharing, advanced data gathering so the optimal adaptation measures are put in place in each location, and enhanced finance.</li> <li>Developed countries meet their finance targets, but developing countries continue to highlight the need for more funding.</li> <li>Overall good progress towards meeting NDCs.</li> <li>Further hybridization of architecture and increasing multilevel complexity.</li> </ul>	<p><b>Bank for International Settlements (BIS):</b></p> <ul style="list-style-type: none"> <li>More inclusive, though still relatively exclusive.</li> <li>Retains central position.</li> </ul> <p><b>International Monetary Fund (IMF):</b></p> <ul style="list-style-type: none"> <li>Institutional reforms to reflect changing geopolitical landscape and multipolar world.</li> <li>Incorporates concerns from emerging economies.</li> <li>Division of labour with new institutions.</li> <li>However, still contested by development of new institutions led by emerging powers.</li> </ul>	<p><b>World Bank:</b></p> <ul style="list-style-type: none"> <li>Institutional reforms to reflect changing geopolitical landscape and multipolar world.</li> <li>Division of labour with new institutions such as the NDB or the AIIB.</li> </ul> <p><b>World Trade Organization (WTO):</b></p> <ul style="list-style-type: none"> <li>Reformed.</li> <li>Incorporates new rules regarding SOEs.</li> <li>Conflict over appellate body solved.</li> </ul>	<p><b>United Nations (UN):</b></p> <ul style="list-style-type: none"> <li>Greater coherence within P5 and between P5 and non-permanent members = more responsiveness.</li> <li>Use of the veto declines.</li> <li>UNSC continues to have legitimacy/authority but many members voice legitimacy concerns due to power imbalances in composition of the FIGO.</li> <li>Consensus on need to reform UNSC, but no consensus on what form it should take.</li> <li>Reform of the UNSC would be feasible, but if more countries (India, Brazil, Germany, Japan) are included as permanent members the veto will not be removed or watered down.</li> <li>UN increasingly highlights links/nexus between security and health, climate change, migration M</li> </ul> <p><b>Non-Proliferation Treaty (NPT):</b></p> <ul style="list-style-type: none"> <li>Remains in place.</li> </ul> <p><b>International Criminal Court (ICC):</b></p> <ul style="list-style-type: none"> <li>Operational.</li> </ul> <p><b>Cybersecurity FIGO:</b></p> <ul style="list-style-type: none"> <li>An attempt is made to create the first global cyber FIGO, but it fails (long negotiations lead to an initial framework agreement but ratification flags to the point that it remains dead letter).</li> </ul>



	<ul style="list-style-type: none"> <li>• Finance for adaptation.</li> <li>• L&amp;D, reparations for irreversibly damaged nations.</li> <li>• <b>Wildcard:</b> a UNFCCC citizens' GA on climate change is created.</li> </ul> <p><b>Intergovernmental Panel on Climate Change (IPCC):</b></p> <ul style="list-style-type: none"> <li>• Gains support.</li> <li>• Able to produce objective, independent, evidence-based reports.</li> <li>• ARs and special reports have a large impact and lead to civil society mobilization</li> </ul> <p><b>International Energy Agency (IEA) and International Renewable Energy Agency (IRENA):</b></p> <ul style="list-style-type: none"> <li>• Despite being energy-focused FIGOs, both the IEA and IRENA increasingly gear their energy-related work towards climate mitigation. This leads to a high degree of overlap between the two organizations. In order to differentiate, the IEA carves out a niche in mitigation technologies for existing GGs; whereas IRENA focuses increasingly on policy-m support for developing countries.</li> </ul> <p><b>Geoengineering FIGO:</b></p> <ul style="list-style-type: none"> <li>• States create an organization on geoengineering. It starts as a sort of IPCC for the</li> </ul>			<p><b>Lethal Autonomous Weapons:</b></p> <ul style="list-style-type: none"> <li>• States reach an agreement regulating the use of lethal autonomous weapons, with a high number of signatories but with little enforcement capability. In parallel, an IIGO is set up to regulate the export of these weapons systems.</li> </ul>
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	<p>science related to these technologies, but then starts to work towards regulation of their use.</p> <p><b>Wildcard:</b></p> <ul style="list-style-type: none"> <li>Fighting climate colonialism (e.g., land grabs in Southern countries, indigenous territories) → perhaps an IO in the Global South develops to combat this/collaborate.</li> </ul>			
<b>Regional FIGOs</b>	<p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Remains in leadership position.</li> <li>High authority and legitimacy.</li> <li>Climate diplomacy.</li> <li>Climate policy as instrument for identity building.</li> <li>Commission able to enforce environmental policy.</li> <li>Systematic and long-term planning.</li> <li>COVID-19 recovery in line with Paris Climate Agreement and the European Green Deal.</li> <li>Most MS have made good progress towards meeting 2030 targets, and these increase in ambition.</li> <li>2050 climate neutrality within reach.</li> <li>Technology transfers to Global South.</li> <li>Shift in financial flows towards sustainable alternatives to GHG</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>RFAs continue to evolve, separately.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Retains central position in GFG (Zhang, 2020) but is less dominant.</li> <li>Regime in EU still highly formal compared to other regions but no further push for strong regulatory efforts.</li> </ul> <p><b>ASEAN</b></p> <ul style="list-style-type: none"> <li>Chiang Mai Initiative Multilateralization (CMIM) → delinked from IMF/or delinked portion increases (Grimes &amp; Kring, 2020; Henning, 2006).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Inter-regional initiatives develop. RTAs connect (increasing one-level convergence).</li> <li>China and India more assertive role through regional institutions (Zhang, 2020) such as the AIIB and NDB.</li> </ul> <p><b>European Union (EU):</b></p> <ul style="list-style-type: none"> <li>Steps towards fiscal union.</li> <li>Progress towards Euro-African Trade Partnership (EATP).</li> </ul> <p><b>Asian Infrastructure Development Bank (AIIB):</b></p> <ul style="list-style-type: none"> <li>Expands scope of activities.</li> <li>Division of labour with WB.</li> </ul> <p><b>New Development Bank (NDB):</b></p> <ul style="list-style-type: none"> <li>Focus on South-South cooperation.</li> <li>Expands activities.</li> <li>Division of labour with WB.</li> </ul> <p><b>Other regional organizations:</b></p> <ul style="list-style-type: none"> <li>ASEAN, African Union, and to a lesser extent</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Formal regional IGOs play a constructive role in regional challenges or at least have engaged in open dialogue with non-member states who hold a great stake in regional developments.</li> <li>Significant level of consultation with relevant FIGOs. However, in certain regions where states hold unbalanced power dynamics in FIGOs there may be a certain level of uncoordinated fragmentation.</li> </ul> <p><b>Middle East:</b></p> <ul style="list-style-type: none"> <li>Talks about regional security architecture.</li> <li>Dialogue Iran – Kingdom of Saudi Arabia (KSA) – United Arab Emirates (UAE).</li> </ul> <p><b>Shanghai Cooperation Organization (SCO):</b></p> <ul style="list-style-type: none"> <li>Prominent role.</li> </ul>

	<p>emission intensive activities.</p> <ul style="list-style-type: none"> <li>• Subsidies redirected away from fossil fuels.</li> <li>• Alignment of fiscal framework and trade policies with PA and climate neutrality objectives → horizontal policy integration.</li> <li>• Hydrogen infrastructure investment and competitive hydrogen market.</li> <li>• High involvement of public and CSOs.</li> <li>• Just transition framework: support workers, communities and regions negatively affected by the transition.</li> <li>• Integrated approach to support developing countries' climate, adaptation and Sustainable Development Policies (SDG) (health, food-security, nature protection and restoration, and climate adaptation).</li> <li>• EU-India Clean Energy and Climate Partnership advances (Nordenstam, 2021).</li> </ul> <p><b>African Union:</b></p> <ul style="list-style-type: none"> <li>• Progress towards Great Green Wall.</li> <li>• Increase access to clean, reliable, and affordable energy.</li> <li>• Climate policy aligned with Agenda 2063.</li> </ul>		<p>MERCOSUR, advance towards further institutionalization.</p> <ul style="list-style-type: none"> <li>• Strong focus on health and development (increasing cross-cutting issue convergence) IAB</li> <li>• Umbrella organization created for coordination of regional development banks (RDBs). Umbrella institution manages whole system.</li> </ul>	<ul style="list-style-type: none"> <li>• Internal tensions remain. What will be the role of China and India?</li> </ul> <p><b>OSCE:</b></p> <ul style="list-style-type: none"> <li>• Achieves greater prominence given its role fomenting human rights and free and fair elections. Perhaps a few success stories in this regard: Belarus seems likely.</li> </ul> <p><b>NATO:</b></p> <ul style="list-style-type: none"> <li>• NATO would stay mildly relevant if Russia remained under Putin's control, but it wouldn't be used to counter China.</li> <li>• A few of its functions would have been taken over by the EU, whose drive towards strategic autonomy would've resulted in a somewhat stronger CSDP.</li> <li>• Drive towards strategic autonomy would've been more prominent in other matters (health, tech), as the EU wouldn't feel so many security threats to begin with.</li> </ul>
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	<ul style="list-style-type: none"> <li>Development of regional solar power development projects, e.g., in East Africa (via strengthened East African Centre for Renewable Energy and Energy Efficiency) (Chisika &amp; Yeom, 2021)</li> <li>West Africa ECOWAS development of solar PV, comprehensive energy market reforms, strengthened cross border electricity trade (Oyewo, 2021).</li> </ul> <p><b>Latin America:</b></p> <ul style="list-style-type: none"> <li>Some of the existing regional organizations in Latin America increasingly start to collaborate with the IEA and IRENA in developing RE, given their fruitful natural resource base and potential.</li> </ul> <p><b>Asia:</b></p> <ul style="list-style-type: none"> <li>AIIB more focus on renewables.</li> <li><b>Wildcard:</b> India looking to become a climate leader through initiatives like the International Solar Alliance or climate diplomacy (Nordenstam, 2021).</li> </ul>			
<b>IIGOs</b>	<p><b>Global Leadership Group:</b></p> <ul style="list-style-type: none"> <li>Strong focus on climate action.</li> <li>Challenge: easing geopolitical tensions arising from energy transition (e.g., critical minerals, land use, water use...).</li> </ul>	<p><b>Financial Stability Board (FSB):</b></p> <ul style="list-style-type: none"> <li>Gains strength as central coordinator.</li> <li>Organizational structure reformed to reflect changing geopolitical landscape.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Informal organizations proliferate.</li> <li>Umbrella organization created to coordinate activities of RDBs.</li> </ul> <p><b>BRICS:</b></p> <ul style="list-style-type: none"> <li>Push for further integration.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Mostly act as a complement to FIGOs as a first point of contact to build consensus and coordinate and set the tone for the FIGO. Symbiotic relationship.</li> </ul>

			<ul style="list-style-type: none"> <li>Expands membership (e.g., Argentina or Vietnam) and builds political alliances to increase influence.</li> <li>Mutual competition in other markets remains an issue.</li> <li>Cooperation with other trade blocs.</li> </ul> <p><b>G-20:</b></p> <ul style="list-style-type: none"> <li>Replaced by Global Leadership Group (more inclusive).</li> </ul>	<ul style="list-style-type: none"> <li>P5+1 and other international contact groups plays an influential role and can find consensus on the major sticking points.</li> </ul>
<b>Non-profit NSAs</b>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Importance of local epistemic communities.</li> <li>Rise of 'prosumers and decentralized energy.</li> </ul> <p><b>Cities and sub-state authorities:</b></p> <ul style="list-style-type: none"> <li>Strong role of cities (organized in networks).</li> <li>Coordination function, implementation.</li> </ul> <p><b>NGOs, activist groups, grassroots movements:</b></p> <ul style="list-style-type: none"> <li>Very active.</li> <li>Broad transnational movement.</li> <li>Consumer activism when companies do not make ambitious climate commitments/do not live up to the ones they make.</li> <li>Incorporate environmental justice perspective.</li> <li>Challenge: representation Global South.</li> </ul> <p><b>Trade unions:</b></p> <ul style="list-style-type: none"> <li>Involved in developing framework for energy transition (just transition).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>CSOs involved in monitoring, regulation (participatory politics).</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Strong role for civil society in development (NGOs, foundations).</li> <li>Strong role for civil society, trade unions in fair trade practices.</li> <li>Active advocacy.</li> </ul>	<p><b>Overall:</b></p> <ul style="list-style-type: none"> <li>Track II/III diplomacy gains pace in the flowing scenario and therefore civil society organizations play a strong role in global governance of security talks.</li> </ul> <p><b>NGOs, activist groups, grassroots movements:</b></p> <ul style="list-style-type: none"> <li>Although interstate conflicts are rare and violence on the whole is declining, CSOs maintain a focus on issues of societal violence (e.g., gender-based violence).</li> </ul>

<b>For profit NSAs</b>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Private initiatives important, particularly involved in technological development.</li> <li>Companies make increasingly ambitious climate commitments and walk the talk M</li> <li>PPPs on the rise M</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Involved in regulatory process.</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Private sector involved in promoting fair and sustainable trade through supply chain management, best practices, codes of conduct...</li> </ul>	<b>Overall:</b> <ul style="list-style-type: none"> <li>Demand for private military and security companies will still exist as there will still be security vacuum pockets present in many parts of the world. However, they will not be as prominent.</li> </ul>
<b>Overall</b>	<ul style="list-style-type: none"> <li>Polycentric architecture, centred around PA agreement.</li> <li>Further hybridization of architecture (more inclusion of NSAs, particularly CSOs and sub-state authorities).</li> <li>Complex multilevel dynamics (local x national x regional x global).</li> <li>Inclusion of climate justice issues and L&amp;D.</li> <li>Importance of regional organizations.</li> <li>Rapid declining cost of renewable energy technologies.</li> </ul>	<ul style="list-style-type: none"> <li>China and other emerging powers such as India take a more important position in GFG through institutional reforms of existing institutions and involvement in regional institutions (Zhang, 2020) → less unilateral.</li> <li>Less Western dominated (architectural core is still FSB, IMF, BIS, but the G20 has been replaced by the GLG).</li> <li>No real push for extensive reform.</li> <li>Remains highly informal.</li> <li>Functional differentiation reduces to some degree, though primarily through greater role of FSB.</li> <li>Regional differences do not converge, RFAs evolve separately → fragmentation.</li> <li>More inclusion of NSAs (hybridization).</li> <li>Decreased dominance of the dollar (euro, renminbi, Indian rupee).</li> </ul>	<ul style="list-style-type: none"> <li>Proliferation of informal organizations.</li> <li>Inclusion of civil society (participatory governance).</li> <li>More inclusiveness of emerging powers.</li> <li>Inter-regional cooperation.</li> <li>Division of labour between Bretton Woods institutions and new institutions.</li> <li>Push for integration in regional organizations.</li> <li>'Inclusive digital globalization' in trade and development</li> </ul>	<ul style="list-style-type: none"> <li>Enhancement of open dialogue and thawing of relations between key states in the MENA region (Iran, KSA, UAE, Turkey).</li> <li>Confidence building measures in regions.</li> <li>External actors do not act as spoilers or intervene in these dialogues.</li> <li>Human security perspective not dominant but strong element of the rhetoric.</li> <li>Increasing attention to the nexus between security and other issues, such as climate change, health, migration.</li> <li>Greater sharing of threat intelligence with regards to terrorism.</li> <li>Terrorism is dealt with through broader coalitions that in some cases include both China and the US (e.g., in the Middle East).</li> <li>No specific organization has emerged as there is no agreement, and there can be no agreement, on what terrorism actually means.</li> </ul>

				<ul style="list-style-type: none"><li>• Cybersecurity – formation of an organization but no real tangible action. Ineffective.</li><li>• Renewed role for the EU in some regional and international issues (e.g., climate change or technology).</li><li>• States remain the most important actors by far, but CSOs and sub-state entities' role in global governance has increased somewhat.</li></ul>
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## Bibliography for Annex 5

- Apaydin, F., & Roger, C. (2020). *Blurring boundaries: (In)formality and the governance of global financial markets*. Horizon 2020 GLOBE Work Package 6 Report.
- Bernes, T., Brozus, L., Hatuel-Radoshitzky, M., Heistein, A., Greco, E., Sasnal, P., ... & Caballero-Anthony, M. (2020). Challenges of global governance amidst the COVID-19 pandemic.
- Broude, T., & Haftel, Y., (2020). *The global investment regime and state regulatory space: Assessing the governance role of the European Union and its Member States*. Horizon 2020 GLOBE Work Package 6 Report.
- Budnitsky, S., & Jia, L. (2018). Branding Internet sovereignty: Digital media and the Chinese–Russian cyberalliance. *European Journal of Cultural Studies*, 21(5), 594-613.
- Chisika, S. N., & Yeom, C. (2021). Enhancing sustainable development and regional integration through electrification by solar power: the case of six East African states. *Sustainability* 2021, 13, 3275.
- Coen, D., Kreienkamp, J., & Pegram, T. (2020). *Mapping global climate change governance*. Horizon 2020 GLOBE Work Package 5 Report.
- Coen, D., Kreienkamp, J., & Pegram, T. (2020). *Multilevel governance of global climate change - problems, policies, and politics: Case studies of the EU, ASEAN, and national climate laws*. Horizon 2020 GLOBE Work Package 5 Report.
- Gallagher, K. P., Gao, H., Kring, W. N., Ocampo, J. A., & Volz, U. (2021). Safety first: Expanding the global financial safety net in response to COVID-19. *Global Policy*, 12(1), 140-148.
- Grimes, W. W., & Kring, W. N. (2020). Institutionalizing financial cooperation in East Asia: AMRO and the future of the Chiang Mai initiative multilateralization. *Global Governance: A Review of Multilateralism and International Organizations*, 26(3), 428-448.
- Henning, C. R. (2006). Regional arrangements and the International Monetary Fund. *Reforming the IMF for the 21st Century*, 171-84.
- Korosteleva, E. A., & Petrova, I. (2021). From 'the global' to 'the local': the future of 'cooperative orders' in Central Eurasia in times of complexity. *International Politics*, 58(3), 421-443.
- MacHaffie, J. (2021). Mutual trust without a strong collective identity? Examining the Shanghai Cooperation Organization as a nascent security community. *Asian Security*, 1-17.
- Marx, A., Otteburn, K., Hegde, V., Gao, W., Van der Loo, G., Wouters, J., Deciancio, M., Peixoto, J., Nemiña, P., Pertiwi, B., Bal, C. S., Yulyadi, L., Mursitama, T. N., & Quingmin, Z. (2020). *Mapping of the trade and development global regimes and institutions*. Horizon 2020 GLOBE Work Package 2 Report.
- Nemiña, P., & Espinosa, C. (2020). *The rise of the new official creditors in the XXI Century and the challenges to the global financial governance*. Horizon 2020 GLOBE Work Package 6 Report.
- Nordenstam, A. (2021). A shared understanding of India's climate policy? Insights from a survey of Indian climate experts.
- Levi-Faur, D., & Blumsack, I. (2020). *Mapping global financial institutions*. Horizon 2020 GLOBE Work Package 6 Report.
- Lukin, A. (2021). The Russia–China entente and its future. *International Politics*, 58(3), 363-380.
- Otteburn, K., & Marx, A. (2020). *Shortcomings of the current governance and institutional models*. Horizon 2020 GLOBE Work Package 8 Report.
- Oyewo, A. S. (2021). Transition towards decarbonised power systems for sub-Saharan Africa by 2050.
- Parshotam, A. (2018). Can the African Continental Free Trade Area offer a new beginning for trade in Africa?
- Pradhan, R., & Mohanty, S. S. (2021). Chinese grand strategies in Central Asia: the role of Shanghai Cooperation Organization and Belt and Road Initiative. *Fudan Journal of the Humanities and Social Sciences*, 14(2), 197-223.
- Sánchez Cobaleda, A. (2020). *Case study of the European security architecture: NATO and OSCE*. Horizon 2020 GLOBE Work Package 4 Report.

- Sánchez Cobaleda, A., Kouliopoulos, A., Kissack, R., Bradley, M., & Badell Sánchez, D. (2020). *Mapping of global security threats and the global security architecture*. Horizon 2020 GLOBE Work Package 4 Report.
- Schilirò, D. (2020). Towards digital globalization and the covid-19 challenge.
- Sokol, M., & Pataccini, L. (2020). Winners and losers in coronavirus times: Financialisation, financial chains and emerging economic geographies of the COVID-19 pandemic. *Tijdschrift voor economische en sociale geografie*, 111(3), 401-415.
- Tokhi, A., & Ebetürk, İ. (2020). *Cross-cutting issues in global governance*. Horizon 2020 GLOBE Work Package 7 Report.
- Wang, Y. (2020). New regionalism reshaping the future of globalization. *China Quarterly of International Strategic Studies*, 6(02), 249-265.
- Wouters, J., Kerremans, B., Peixoto Batista, J., Hegde, V., & Raina, A. (2020). *Case study on the World Trade Organization*. Horizon 2020 GLOBE Work Package 3 Report.
- Zhang, F. (2021). Rising illusion and illusion of rising: Mapping global financial governance and relocating China. *International Studies Review*, 23(1), 1-29.

