Building European Resilience and Capacity to Act: Lessons for 2030

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Building European Resilience and Capacity to Act: Lessons for 2030

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Table of Contents

Containing twelve scenarios for the world in 2030, this booklet offers insights into how the EU can maintain and build up its capacity to act in the face of the major disruptive changes that are likely to come over this decade. It is being released in the run-up to German elections in September 2021 that will serve as a kind of referendum on ten years of government-heavy crisis management. We present three scenarios for each of four global phenomena that we have chosen for their potential to change European society within a single generation. These are fields that will structure international affairs and can be used by states and nations to transform one another:

- New digital technologies
- Emerging security threats such as climate change
- Geo-economics (trade and system competition)
- Large-scale migration

The scenarios are in large part the product of four foresight workshops. For the purpose of this booklet, we have simplified them by focusing on just two of their variables (the originals were built on five or six). We then worked them into cohesive two-step narratives together with our in-house experts before picturing how the European Union will fare in each – and what kind of attributes the EU needs to build up if it is to sustain its capacity to act.[1]

"CAPACITY TO ACT": SIGNPOSTS FOR HOW WELL THE EU WILL NAVIGATE FUTURE CRISES

What do we mean by Europe's "capacity to act"? The EU is a market power – a regulatory power – and its capacity to act at home and abroad is primarily related to its economic and standard-setting prowess. Consequently, we carried out the foresight exercise to generate signposts for us to analyze how well EU policymaking performs under strain and assess whether European regulators are ready for the future. Are Europe's rule-makers on a good path in these four fields, and are they capable of changing direction where necessary and nimbly making new investments and setting new standards? We will chart the EU's real-world progress in follow-up monitoring studies – one for each of the four fields – but this scenario booklet is meant to stand on its own. It offers readers – and voters – a way to judge the strategic approach of EU policy for themselves.

Each of the four main chapters imagines how the world might look in 2030. Each one imagines three different futures in the respective field of tech, security, geo-economics, and migration, as well as the paths that the EU might take to navigate them: a **status quo scenario,** best-case scenario, and **worst-case scenario.** Each time, the "status quo scenario" represents the European Union's current path as we understand it and examines the implications of this current path for future resilience. The two alternate scenarios are judged "best" or "worst" not by the gravity of the disasters or rosiness of the opportunities Europeans face along the way, but by the outcome for the EU. Together, they tell us something about which characteristics the EU must develop to not only act in a crisis but also harness it. We draw lessons for policy after each scenario.

LINEAR THINKING: HOW BRUSSELS STANDS IN ITS OWN WAY WHEN IT COMES TO NIMBLE POLICYMAKING

The exercise confirmed the importance of nimble policymaking and regulation by the EU if it is to withstand and harness disruptive crises. In those scenarios where the EU achieved this – the best-case scenarios – then because it had invested in such basics as European cohesion and international relationship-building. This allowed it to change course and adapt. Investments in Europe's internal cohesion gave it the sufficient political flexibility to make new rules when the situation changed. In the tech chapter, for example, an early pension fund reform allowed companies to invest in overcoming Europe's digital divide, a move that paid dividends when crisis hit. International relationship-building allowed the EU to export its models during a global crisis or respond well to foreign initiatives. In the best-case geo-economics scenario, for instance, the EU had made open-ended investments in the resilience and connectivity of South Asian states, meaning that these countries did not behave defensively when catastrophe came.

The status quo and worst-case scenarios show, by contrast, just how often the EU stands in its own way and prevents itself from a nimble response. In the face of disruption, the EU sticks to old linear assumptions and projections. We were able to show this because each of the four main chapters in this booklet are built around two variables that are usually held in a simple cause-effect relationship by Brussels policymakers. Yet we generated three fundamentally different combinations of each. This showed how a disruption can alter set-

1 The authors thank those who have given their expertise and acknowledge that any errors are ours alone.

tled relationships and challenge consensus positions. The best-case scenarios all occurred when policymakers flipped old assumptions on their head and changed paths. But in the status quo outcomes the EU ignored the change and stuck with existing assumptions; and in the worst-case scenarios it actively reinforced its old path by backing it up with geopolitical muscle. **The first basic lesson is that the EU must look upon disruptions as a means to change policy course.**

THE PURSUIT OF EUROPEAN AUTONOMY: A COMMON THEME IN THE WORST-CASE SCENARIOS

The second basic lesson is that the EU should use disruptions to break policy silos. The EU does indeed aspire to respond to crisis in this iconoclastic style. The European Commission's 2020 report *Charting the Course Towards a More Resilient Europe* is an upbeat manifesto for bouncing back from crisis better – for breaking silos, combining competencies and powers in new ways, and coming back more democratically, equitably, and sustainably. But the EU's aspirations do not seem to match the current realities of EU policy decisions. With its mantra to "never waste a crisis," the EU usually uses disruption to deepen an existing project rather than rethink or even dismantle it. This typically involves "completing" existing integration endeavors such as the digital single market, eurozone, or Schengen. The four status quo scenarios by definition involved this kind of continuity; it is notable that, in all four, things ended negatively for the EU.

THE SCENARIOS CHALLENGE TODAY'S ASSUMPTIONS AND ILLUSTRATE THAT:

- *It is possible for the EU to maintain and spread its democratic values without first resorting to heavy market regulation in the tech domain;*
- *It is possible for the EU to be a leader in resolving the new drivers of conflict like climate change without resorting primarily to ambitious unilateral commitments;*
- *It is possible for the EU to secure access to new resources and technologies without focusing primarily on keeping up with the United States and China; and*
- *It is possible for the EU to attract the kinds of international labor it desires without attracting disproportionate levels of irregular migration from Africa.*

As such, the scenarios offer a corrective to the fashionable idea of achieving autonomy and, in particular, the EU's embrace of the "Brussels Effect." The Brussels Effect is the EU's ambition to live by its own rules in a hostile international environment – to unilaterally regulate globalization.[2] In the current defensive version that characterizes the status quo scenarios, it involves the EU "completing" integration projects, closing off its various internal markets and deepening the relevant internal rules. The EU puts up protections not just because it needs to but because it believes this gives it leverage in a disruptive world. It tries to leverage access to Europe's consumers and oblige foreign countries and businesses to take on its regulations. In our scenarios, when the EU behaved in this way, it only cut Europe's internal market off from global supplies of natural and human resources and stymied European innovation under red tape. It also politicized protective EU measures such as investment screening or visa controls, which are necessary on their own merits. In short, it made the EU vulnerable to crisis.

THE INSTRUMENTAL USE OF STRATEGIC FORESIGHT: WHY THE EU ASKS THE WRONG QUESTIONS

The third lesson derives from the notable fact that the best-case scenarios in all four chapters began with a major crisis or even catastrophe, but the worst-case scenarios did not. This was counterintuitive: catastrophes are surely something for worst-case worlds. And yet, it was the outcomes we were judging. And the ability to absorb catastrophe and harness it in the best cases derived from the fact that the EU had avoided relying too heavily on threat analyses and strong projections. This left it unprepared for the particular crisis that hit – but adaptable. In the worst-case scenarios, by contrast, we imagined the EU successfully predicted the next big crisis and protected itself against it. But its response lacked flexibility and improvisation. Moreover, it had also "predicted" vast other crises and invested in protective defenses to these as well, leaving its resources exhausted. It tended to push ahead with its chosen course in the face of resistance at home and abroad using heavy-handed power-political tools.

This provided us with lessons about how to use strategic foresight in the real world. The status quo scenarios illustrated that the EU is relying too much on horizon-scanning and trend analysis and too little on more speculative forms of foresight. It is try-

2 The idea that the EU can exercise regulatory power was first set out by academics like Anu Bradford and subsequently picked up and adapted by politicians like Charles Michel, the president of the European Council. See: Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford, 2020).

ing to use threat analyses and linear projections to anticipate unpredictable future disruptions. There is even a danger that the EU will start instrumentalizing foresight in order to justify a pre-cooked policy course such as "autonomy." Already there are signs that the EU is using threat analyses to show how globalization is going wrong and justify closing off EU markets – generating unilateral European rules on artificial intelligence, climate change, and migration and trying to impose them on others. The worst-case scenarios show that such policies are liable to backfire and create precisely the hostile geopolitical situations they were meant to prevent. This booklet documents our aim to deploy foresight in more speculative and open-ended ways.

BREAKING BOTH SILOS AND POLICY PATHS: TOWARD A DIFFERENT KIND OF EUROPEAN MARKET POWER

In sum, the scenarios suggest that a resilient EU is one that avoids thinking in silos and trajectories and makes careful but open-ended commitments to integration across borders and fields. It is notable, for instance, just how much the strategic challenges of tech, geo-economics, climate, and migration cut across all the chapters and not only those dedicated to each one. The masterful EU of the best-case scenarios is one that breaks silos and combines its digital, capital, defense, and labor markets in pursuit of growth, innovation, and democratic values. Whereas the pursuit of the Brussels Effect tends to envision the EU using each crisis to ratchet an individual market project to completion – the digital single market, the defense market, and so on – the more successful approach would see the EU mixing and matching across its market competencies to maintain access to innovations, capital, state backing, and the brightest minds.

That is the recipe for a more compelling form of European power and leverage.

The Story Lines in Our Four Fields

This report was written in the framework of DGAP's "Ideenwerkstatt Deutsche Außenpolitik," a project funded by Stiftung Mercator that reflects on the capacity to act in German and European foreign policy. To assess whether the EU is on the right course for 2030, we looked at four fields: **technology, geo-economics, security, and migration.** By envisioning three scenarios for 2030 in each one – a **status quo, worst-case,** and **best-case scenario** – we aim to ensure the EU is properly aware of the implications of continuing its current trajectory, is prepared for the worst, and understands how to achieve the best. While our group of experts has created scenarios based on multiple dynamics for us to use as a benchmark to monitor the EU's progress over the next decade, we have cherry-picked a single one for this booklet and pulled out two of its key variables. The status quo, worst-case, and best-case scenarios outlined here each combine these variables in different ways and challenge the usually assumed cause-effect relationship between them, thereby highlighting new policy options that break old path dependencies in Brussels and Berlin.

Taken together, we note that the status quo and worst-case scenarios are not so different in all four chapters. Both tend to envision the EU trying to leverage its internal market in a bid to unilaterally influence and regulate globalization. If the worst-case scenarios are worse, then because, in them, the EU tends to behave in a more assertive ideological manner and be more mistrustful of outside powers. In the best-case scenarios, ironically, it is often a major crisis or disaster that catalyzes a positive change of path. It is notable that, whereas in the status quo and worst cases the EU has tried to predict crises and protect itself against them, in the best cases it has tended to invest in relations and generic capabilities that help it respond to whatever comes. Successful resilience is – in large part – about attitude.

DIGITAL TECHNOLOGIES STORY LINE

For the purposes of this booklet, we took two variables from this scenario – the EU's regulatory power and the use of new technologies for power political competition – and ran them through different iterations. The overall finding is that the EU is too quick to regulate in its bid to protect its democratic values. Only in the best-case scenario does it learn that assertive regulation comes at the cost of innovation, and innovation is what it needs to build the European market, encourage Europeans to be early adopters, and develop technologies that are snapped up abroad – in short, to use disruptive new technologies to sustain and spread its values.

- ***In the status quo scenario,*** *the EU initially does well in regulating for data protection and the use of artificial intelligence. Its standards are taken up worldwide as large multinational tech firms seek the kind of regulatory size and stability that the EU offers. But policymakers in Brussels get carried away by this early success, and rifts appear with the United States about which of them is the global standard-bearer for democratic values. By 2030, Europe's tech economy and level of innovation fade, and the EU finds itself on the sidelines. It is forced to watch as the United States and China regulate things together.*

- ***In the worst-case scenario,*** *the EU focuses on regulating communication technologies, which are vital for democracy and the European public sphere. It, thus, seeks to protect itself from hostile disinformation campaigns and, in turn, sustain and spread its values. But for ideological reasons it invests in a huge satellite internet project to create information autonomy. This investment diverts state support away from smaller firms and bottom-up innovation. As the European economy sinks and loses its value as an integrated regulatory space, the Chinese do launch a massive disinformation campaign.*

- ***In the best-case scenario,*** *the EU invests in projects that are either in tune with Europeans' priorities or capture their imagination – for example, it supports quantum technology, the digital euro, and a Mars exploration program. Consequently, these initiatives help smaller European firms to innovate, and they build Europeans' trust in technology, even as natural disasters lead to global tech outages. The EU market grows as European technology is adopted first at home and then abroad. Having thus addressed the digital divide inside Europe, the EU is able to engage in nimble and sympathetic norm-setting.*

TRADE AND GEO-ECONOMICS STORY LINE

The two variables we selected here were the quality of relations between the United States and China and the EU's access to resources and technology. The overall finding is that the EU should not focus primarily on competing with the United States and China – or even trying to force them to cooperate. Both US-Chinese cooperation and competition lead to the EU being cut out of the global market, restricting its access to resources and technological breakthroughs. The priority should rather be to create issue-specific alliances that diffuse influence and power away from the "G2."

- ***In the status quo scenario,*** *competition between the United States and China grows, and multilateral organizations like the WTO cease to work properly. Beijing and Washington drive up global innovation and resource access, but they do so by creating two competing blocs that decouple and seek to close the other out. The EU tries to keep up but almost inevitably fails to compete with China and the United States. The EU is divided between the two of them – while Brussels tries to align with the United States on regulatory terms, poorer member states align with China for cost reasons.*

- ***In the worst-case scenario,*** *China and the United States cooperate and begin to bilaterally establish rules on access to resources and technologies. Cooperation occurs because China has turned into the predominant economic superpower and the United States has retreated. China is particularly active in imposing "cooperation agreements" on other countries, having sponsored their regional bodies. The EU, as a result, finds itself in a cooperative international order structured around the United States and China but finds its access to disruptive new technologies strictly limited by a Beijing that fears triggering instability.*

- ***In the best-case scenario,*** *the EU does not focus on competing or cooperating with the United States and China. Instead, it finds itself caught up with India, which has been hit by disaster and finds itself committing to multilateral organizations like the World Trade Organization whose reform it has long blocked. The EU sees a way to reinvigorate its own international reform agenda. It helps set up issue-specific international networks of governments, businesses, experts, and citizens around resources and technologies – platforms in which smaller states, including its own members, have some influence.*

EMERGING SECURITY THREATS STORY LINE

The two variables we took in this field were climate change and the quality of security cooperation. The finding here is that investing in security cooperation is one key to successful global climate adaptation, allowing for the exchange of technologies as well as permitting cooperation in domains like space. The EU's assumption was the reverse: that the progressive breakdown in international security cooperation is a result of climate stress, the logical response to which is to strengthen its unilateral commitment to climate targets. In fact, this unilateral attempt to regulate global climate targets and deal with conflict drivers is self-defeating.

- ***In the status quo scenario,*** *global security cooperation becomes sclerotic due to a lack of investment from the United States and its allies. Consequently, the incidence of conflict rises. In this difficult landscape, the EU invests in high unilateral climate commitments. This does indeed protect it from violence, but only because the main form of violence is an eco-extremism spurred by hostility at the lack of international ambition and cooperation. Although the EU is initially spared this thanks to its high unilateral standards, the lack of security cooperation allows this violence to spill into Europe.*

- ***In the worst-case scenario****, global security cooperation breaks down and is replaced worldwide by the emergence of regional security orders. The EU embraces this shift, positioning itself as a leader in regional governance. It offers its neighbors generous access to its Green Deal for taking on its standards. But the breakdown of global security cooperation leads to highly risky regional behavior, not least when it comes to climate engineering. As the EU tries to keep its regional order together, it lifts conditionality to access its green funds, leading to corruption and leaving Eastern Europe open to conflict.*

- ***In the best-case scenario,*** *global security cooperation all but collapses – leaving states badly exposed when a series of climate catastrophes roll across the Pacific, hitting both China and the United States. The pair reinvest in trust-building, which permits climate-related cooperation across all domains: space, maritime, land, airspace, and cyber. This cautious rapprochement between the United States and China unlocks cooperation between Western countries and emerging powers. The EU is able to take advantage of these shifts because it has been investing in security cooperation itself.*

MIGRATION STORY LINE

The two variables we took here were the EU's policies to compete for global migrants and the volume of irregular migrants crossing the Mediterranean. Our finding is that the EU's fears are self-fulfilling. It believes that every time it opens up and competes with the world's other large labor markets for migrants, it will attract a disproportionate influx of irregular migration from Africa. Gradually, the EU learns that Africa itself is capable of producing competitive labor markets that retain labor. It is European policies to buffer against irregular migration from Africa that disrupt these markets and give rise to large volumes of irregular migration.

- ***In the status quo scenario,*** *the EU must make its labor market attractive for transactional gain. China has started making deals with elites worldwide, offering access to Chinese universities and jobs in return for access to natural resources. Forced into competing, the EU is obliged to reduce any political conditionality it might have imposed on its African partners – after all, China does not impose political conditions there. The human rights and democratic situation in Africa subsequently deteriorates. The EU's efforts to make its labor market more attractive than China's while closing itself off to its near abroad lead to a huge wave of migrants from East and West Africa.*

- ***In the worst-case scenario,*** *the EU finds itself again competing with Asian labor markets – this time because migration and regional free movement have become tools of geopolitical alliance building and geo-economic competition. The EU positions itself as a civilizational zone and consequently hardens its border to North Africa. But North African states like Morocco exploit the way Europe is closing itself off and reach out to their own southern neighbors, using migration diplomacy to tip the balance of power in West and East Africa. Soon, Morocco is overwhelmed by the strains of handling migration in this way. Another wave of migration from sub-Saharan Africa through North Africa to Europe results.*

- ***In the best-case scenario,*** *China's population ages and shrinks, and its economy dips, leading it to withdraw investment and "security advisors" from spots like East Africa. As conflict in Africa grows, the EU fears its own relative attractiveness and starts offering African elites access to the European labor market in return for holding back migrants. But the Ethiopian government explains that Europe is not, in fact, an attractive destination. Instead, Addis Ababa would prefer to receive support to build up the East African labor market. Having proved it can retain local labor, it asks for further support from the EU to pressure other regional labor markets like the Gulf, demanding they treat migrant workers better. As a result, Europe becomes competitive but faces no influx.*

Introduction: Seeing Europe's Future from 2021

COVID-19 is yet another development that demonstrates the EU's weak ability to withstand crisis. The pandemic revealed Europe's heavy reliance on a global governance system that is no longer fit for purpose; it showed the limits of the EU's economic power, exposing weak links and critical dependencies in supply chains; and it made clear that disinformation is impacting its political decision-making. It also illustrated the EU's inability to harness and use disruptions. While the pandemic has catalyzed a whole set of unexpected outcomes – events that are high impact, highly improbable, and explicable only in retrospect – the EU has remained stuck in a familiar path and set of long-term goals, trapped in thinking that is linear and siloed. Really, it ought to be better at this by now. But when a system of governance that was considered futuristic as recently as the 1990s is forced into reactive mode, it looks vulnerable and unwieldy.

The pandemic had not been properly anticipated in Europe: warned of – yes, many times – but not actively prepared for. Although some contingency planning existed for the risk of such a health crisis – the German White Book on Security Policy considered pandemics one of ten key challenges to German security – little action had been taken. The UK is usually singled out for missing an open goal here. Despite its Operation Cygnus, a 2016 exercise on a "Swan Flu" pandemic, it failed to apply the 20 lessons that resulted. Interested Asian states, by contrast, noted the exercise and did. Singapore, for example, duly rode out the COVID-19 pandemic thanks, in part, to the insights it had borrowed from Cygnus. But Singapore had also had recent experience with avian flu and was looking to hone its system while the UK faced multiple possible threats all vying for attention and invested a little in each.

Such episodes thus raise three important questions, which we address here:

1. How can such overwhelming crises be anticipated?
2. How can resilience toward this type of crisis be enhanced?
3. What is the right relationship between anticipation and resilience?

These questions are relevant because we can quite easily predict the big drivers of global change: breakthroughs in digital technologies, economic shifts, climate change, and demographic trends. And governments can, in turn, put strategic planning measures, such as top-down government initiatives and targets, in place. But, as we have seen, the effects of these global changes are often highly unpredictable. It is bottom-up resilience that is often most useful in such situations – with past open-ended investments in societal cohesion and international partnership paying off. In our assessment, it was the failure to build up domestic cohesion and international relationships and *not* the failure to implement the results of the Cygnus exercise that was really missing in Boris Johnson's UK. Consequently, Britain's loss of bounce provides the real lesson that Europeans must learn for the future.

FROM COVID-19 TO 2030: EUROPE'S PATH TO THE FUTURE

Last year, many organizations looked resolutely forward, predicting the big challenges of the future and setting themselves new targets and strategies. The year 2030 served as a target date for processes such as the UN's Agenda 2030 and NATO's Reflection Process. NATO, for example, expressed the will to strengthen its political profile and adapt to the new geopolitical environment by 2030. As NATO Secretary General Jens Stoltenberg put it: "As the world changes, NATO will continue to change." That strategists in their corner offices in HQs would use the date 2020 as an excuse and spur to look forward a decade to 2030 was perhaps the only really predictable thing about the last year. The COVID-19 crisis – a full-on crisis of post-1990s globalization – only reinforced the sense that 2020 was a year that would define our future course, forcing us to take a step back and think about how our future can play out.

European Commission President Ursula von der Leyen likewise placed a new focus on strategic foresight by putting one of her vice presidents in charge of mainstreaming it across the Commission's services. But these EU exercises either repeated common assumptions or struggled to challenge them. The trouble was that the exercises could not

counteract the implicit understanding that certain domestic and international structures and drivers are given. This is a common feature of risk analysis and capability planning – to take risk factors as immovable constants, feeding into a bleak, negative, and ultimately defensive vision of the future that is all too common among policymakers in Europe. Such views tend to project an EU increasingly alone within a hostile global environment – an EU that must come together by existential necessity rather than free choice.

This tendency for linear thinking is particularly prevalent in Germany, a country known for its status quo approach to global affairs. In the very near future, of course, the German status quo will be disrupted. Not only is Chancellor Angela Merkel set to step down in September 2021 after 16 years in office, but recent polling suggests that the long-ruling "grand coalition" of Christian Democrats and Social Democrats is also set to disappear. This sweeping change at the heart of Europe, coming just ahead of a 2022 French presidential election, can be a unique opportunity to set the EU on a new path. And yet, in Berlin, Paris, and Commission HQ, policymakers seem to be most focused on making progress for the EU in the preexisting Franco-German agendas – deepening the euro area and Schengen as well as, thanks to current US attention, trade and, above all, the digital market.

Insofar as a strategic agenda has emerged in Berlin and Paris, then around the ideas of "European autonomy" and a "geopolitical EU." Such an agenda melds the French desire for the EU to carve an autonomous path in the world and put up protective barriers around itself with a German commitment to the international rules-based order and deepening EU integration. Its current iteration involves the EU closing off old market integration projects from the outside world and deepening their regulation to then use market access and other geopolitical levers to spread these regulations to other countries. This agenda claims to reverse the errors the EU made in the 1990s when Europe supposedly embraced the "end of history" and global market integration. But it employs precisely the kind of deterministic linear thinking that it purports to be correcting – this time, as "the return of history" and "globalization gone wrong" – to persuade Europeans that they must close themselves off and press through their priorities autonomously.

THE EU'S CURRENT NEGATIVE TRAJECTORY

It has to be acknowledged that, looking purely at projections and trajectories, things do indeed look bad for the EU, especially when one thinks back to the hopeful years of the 1990s. Back then, a "free and whole" and "postmodern" Europe served as a model for the future. **Today, its trajectory in four key fields looks bleaker,** and its futures exercises tend to inform big top-down course corrections or efforts to protect the EU from a hostile world:

The tech trajectory: European companies currently make up less than 4 percent of market capitalization in the world's 70 largest digital companies – with companies from the United States and China representing 73 percent and 18 percent, respectively.[3] In other areas, EU providers are barely even present. For example, none of the 8 largest cloud service providers are European while 71 percent are from the US.[4] Lacking a start-up culture and ready well of capital and squeezed between the United States and China, the EU's tech market seems destined to dwindle.

The geo-economics trajectory: The EU's dependence on others for critical resources is growing – for example, when it comes to importing critical resources from non-EU countries. Europe currently imports 78 percent of its lithium from Chile and almost 100 percent of rare earths from China. Given trends in sectors such as engineering and digital technology, the EU will need even more. According to a European Commission forecast, the EU would need 18 times the amount of lithium it currently disposes of by 2030 if demand keeps soaring.[5]

The security trajectory: Sixty percent of the countries most vulnerable to climate change are already affected by armed conflict.[6] And a changing climate exponentially exacerbates conflict.[7] The International Committee of the Red Cross foresees that 200 million people will be in need of humanitarian assistance in 2050, partly due to ecological effects. For example, the impact of climate change will be felt in a decline in human security in the EU's neighborhood. Europe itself will see more frequent and intense natural

3 N.N., "Tech regulation: The Brussels effect, continued," *The Economist*, February 20, 2020.

4 Felix Richter, "Amazon Leads $130-Billion Cloud Market," *Statista*, February 4, 2021: https://www.statista.com/chart/18819/worldwide-market-share-of-leading-cloud-infrastructure-service-provider (accessed March 1, 2021).

5 European Commission, "Critical Raw Materials for Strategic Technologies and Sectors in the EU – A Foresight Study," September 3, 2020: https://ec.europa.eu/docsroom/documents/42881 (accessed March 1, 2021).

6 International Committee of the Red Cross, "When Rain Turns to Dust," ICRC Report, July 7, 2020: https://www.icrc.org/sites/default/files/topic/file_plus_list/rain_turns_to_dust_climate_change_conflict.pdf (accessed March 1, 2021).

7 Adrien Detges, "Climate and Conflict: Reviewing the Statistical Evidence," Report of the Climate Diplomacy Initiative (a collaborative effort of Germany's Federal Foreign Office in partnership with adelphi), March 2017: https://www.adelphi.de/de/system/files/mediathek/bilder/CD%20Report_Quant_201705%20Detges%20adelphi%20Climate%20and%20Conflict.pdf (accessed March 1, 2021).

hazards – for example, with extreme heat waves to occur once in two years from 2050 onward.[8]

The migration trajectory: The "laws" of demography and market "push and pull" look bleak. One hundred years ago, when Europe still enjoyed a degree of global ascendancy, its demography accounted for 20 percent of the world's population.[9] By 2030, it will be around 8.5 percent.[10] But, judged in raw numbers, Europe is the most attractive destination for global migrants, drawing in nearly one third of them, particularly those from nearby unstable countries.[11] The EU looks set to experience an increase of between 21 and 44 percent in immigration compared to the previous decade, much of it irregular.[12]

WAYS IN WHICH BIG DISRUPTIONS ALLOW US TO CHANGE TRAJECTORIES

In short, by most measures, conflict is set to increase, climate impacts to become heavier, innovation in Europe to shrink, and demographic changes to create vital skills gaps that will not be filled despite large-scale migration. But foresight is an opportunity to think beyond present structures and recognize that charting a trajectory from past to present does not always help us understand what is next, let alone inspire Europeans to build up a capacity to seize opportunities that may emerge en route to 2030. For this, the EU needs to overcome its negativity biases – for example, a perception of being a fortress under siege by migrants or of being stuck between the United States and China. Otherwise, its path will be one of fatalism and self-fulfilling fears.

Instead of, as today, charting trajectories and trying to predict the next big disruptive crisis, it is a useful mental exercise to accept that big disruptions will come and, so, to ask what alternative new paths these might open up for the EU. To this end, it is instructive to show how **the COVID-19 pandemic is already altering trajectories in key fields by exacerbating the following:**

Acceleration and deceleration: The digitization of supply chains and customer interaction leapt forward by an estimated four years and the creation of digital products by seven years. E-commerce's share of global retail trade grew from 14 percent in 2019 to about 17 percent in 2020. The adoption of cryptocurrencies and moves toward a cashless society accelerated.[13] Blockchain applications were used to track contagion, manage a tsunami of health insurance payments, and uphold medical supply chains. But other trends were sent into reverse, including biometric solutions such as fingerprint recognition, which rely on physical contact that now poses a health risk, and facial recognition, which became difficult in mask-wearing populations.[14]

Unexpected new eventualities: The pandemic braked years of global demographic growth. The deadly virus exercised a downward effect although not through the predicted mechanism of increased deaths. Rather, the long-term demographic trajectory was depressed due to reduced births as families delayed having children or even dropped the idea altogether.[15] Large cities and developed economies also experienced population loss through "reverse migration," the return of migrant workers to their countries and rural areas of origin.[16] And there was a growth in regional travel bubbles as neighboring countries focused away from global labor and concentrated on keeping their borders open to one another.

Lingering uncertainties: As for drivers of conflict like climate change, it is unclear whether the *reduced* emissions from physical travel or the *growth* of emissions from energy-hungry technologies like blockchain and cryptocurrency will win out. While political violence dipped by 10 percent month on month, and demonstrations significantly declined by roughly 30 percent,[17] the increased use of online plat-

8 European Environment Agency, "Climate change adaptation and disaster risk reduction in Europe," EEA Report No. 15 (2017): https://www.eea.europa.eu/publications/climate-change-adaptation-and-disaster (accessed March 1, 2021).

9 Bella Jordan et al., *The European Culture Area: A Systematic Geography* (London, 2020), p.74.

10 UN Department for Economic and Social Affairs, UN Population 2030 (2015): https://www.un.org/en/development/desa/population/publications/pdf/trends/Population2030.pdf (accessed March 1, 2021.)

11 IOM, Migration in the World: https://www.iom.sk/en/migration/migration-in-the-world.html (accessed March 1, 2021).

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13 UNCTAD, "How COVID-19 triggered the digital and e-commerce turning point," *UNCTAD Blog*, March 15, 2021: https://unctad.org/news/how-covid-19-triggered-digital-and-e-commerce-turning-point (accessed June 1, 2021).

14 Stephanie Kanowitz, "Tech called up 'in the war against the unexpected,'" *Government Computer News*, March 19, 2020: https://gcn.com/articles/2020/03/19/downstream-tech-effects-pandemic.aspx (accessed June 1, 2021).

15 Melissa S. Kearney and Phillip Levine, "The Coming COVID-19 Baby Bust Is Here," *Brookings Blog*, May 5, 2021: https://www.brookings.edu/blog/up-front/2021/05/05/the-coming-covid-19-baby-bust-is-her (accessed June 1, 2021).

16 Julie Boillat and Julie Zaehringer, "COVID-19, reverse migration, and the impact on land systems," *Global Land Programme Blog*, September 16, 2020: https://glp.earth/news-events/blog/covid-19-reverse-migration-and-impact-land-systems (accessed March 1, 2021).

17 Melissa Pavlik, "A Great And Sudden Change: The Global Political Violence Landscape Before And After The COVID-19 Pandemic," ACLED Special Report: https://acleddata.com/2020/08/04/a-great-and-sudden-change-the-global-political-violence-landscape-before-and-after-the-covid-19-pandemic (accessed June 1, 2021).

forms seemed to herald a lurch toward authoritarianism and surveillance.[18] But it is also worth underlining that these uncertainties remain largely because Europeans failed to seize the moment to ensure positive change – despite being first-movers on breakthroughs such as establishing regional travel bubbles.[19]

OUR OWN FORESIGHT EXERCISE

We at the German Council on Foreign Relations (DGAP) were not immune from the trend of looking at the future. In autumn 2020, we convened experts and officials for four three-day workshops to think of the global landscape in 2030, each of the four focusing on a different field of disruption with vast transformative potential: digital technologies, trade and geo-economics, emerging security threats, and large-scale migration. In each of these policy fields, we asked the group of experts to construct different versions of the future, drawing not on predictions and probabilities, but rather on eventualities that are *plausible*. We told them we wanted to know what the European future might look like if the EU responded to disruptions in a similar way as today, the **status quo scenario;** how it could avoid a **worst-case scenario;** and how it could move toward a **best-case scenario.** In other words, how to use these disruptive fields to change paths in positive ways.

As such, our scenarios were not built from projections, charting a line from (say) the 1990s through 2020 into the 2030s. For each of the four fields, our experts instead picked out a small selection of factors to provide scaffolding for global order in 2030: these variables had to rank as uncertain but influential – "high impact and high uncertainty" – when it came to determining the future within the respective policy fields. We then asked the groups to combine these variables in different ways, using the interplay to shape diverse future environments. The worlds we imagined were very different to today's trajectory, but we were able to explain how we got there in retrospect, working our way backward from 2030 to 2020. Finally, having created multiple alternative futures, we asked the experts to "road test" the EU's behavior under different conditions conducive to a status quo, worst, or best outcome.

In the field of security and defense, for instance, variables included big unknowns such as the future quality of multilateralism and the commitment to – or increasing irrelevance of – multilateral institutions. In tech, key factors included the capacity for climate governance or innovation and the level of advance or stagnation in tech companies. Several factors were considered as near "certainties" across scenarios. In almost every one, China became more powerful and influential than in 2020, there was more great power competition, and irregular and mass migration was considered a challenge or a threat by policymakers and the public alike. But, for instance, in spite of increasing geopolitical and US-China competition, no scenario foresaw that the US dollar would be fully eclipsed as a lead currency by 2030.

FIVE KEY TAKEAWAYS FOR THE EU'S CAPACITY TO ACT IN 2030

We wanted all our futures to be plausible. But that does not mean that they are *probable*. Rather, we asked whether the combination of variables we chose and the path we subsequently plotted backward from 2030 to 2020 were credible. For this reason, readers should treat the various scenarios as creative thought exercises to identify opportunities and pitfalls but not take them at face value. Moreover, they are narrative scenarios, meaning, in some instances, that our experts or we ourselves added color to future events that we deemed relatively unlikely but which had a strong narrative effect. In order to underline certain conclusions and messages, for example, we envisioned that the European Commission would drive through the domestic use of "satellite internet" or that excessive climate geo-engineering by US companies would cause death zones in the Mediterranean.

Caveats aside, what can we learn from this exercise? Across the four fields, **five findings** emerged that are instructive:

First, perhaps unsurprisingly, **all four of our individual policy fields are interconnected.** Hardly any of the core variables that caused the most important effects can be allocated to either one or the other disruptive field (tech, climate, etc.). Even if the different policy fields are looked at in isolation, they interact. For example, the challenge of climate change and related mitigation (through multilateral action commitment) and adaptation (through innovative green technology) has an impact on the frequency and type of possible conflict, future migration and regional coopera-

18 N.N., "Experts Say the 'New Normal' in 2025 Will Be Far More Tech-Driven, Presenting More Big Challenges," Pew Research Center, February 18, 2021: https://www.pewresearch.org/internet/2021/02/18/experts-say-the-new-normal-in-2025-will-be-far-more-tech-driven-presenting-more-big-challenges (accessed June 1, 2021).

19 Meghan Benton, "What's Next for Global Migration? Gazing Into the COVID-19 Crystal Ball," MPI podcast, December 9, 2020: https://www.migrationpolicy.org/multimedia/moving-beyond-pandemic-global-migration-covid-crystal-ball (accessed March 1, 2021).

tion patterns, trade, and competition on innovation in tech. And states' capacity to harness changes in each individual field relied on their access to dip into other fields, i.e., to access new technologies, capital, natural resources, and sharp minds.

Second, and similar to this, all twelve scenarios were ultimately determined by a limited number of variables that often overlapped. One of the variables that had a decisive impact across all scenarios is the quality of great power competition – not so much the degree of competition, confrontation, or cooperation between the United States and China, but rather **the state of multilateralism and the appetite for international cooperation.** This frequently defined whether scenarios turned out to be positive or negative – e.g., whether the EU's neighbors felt like cooperating with the EU in terms of migration, whether global powers jointly worked on tech innovation and regulation or weaponized technologies, and whether they cooperated on solutions to mitigate climate change or escalated negative effects by either doing nothing or pursuing unilateral adaptation. To harness a crisis successfully, it helped if the EU had invested in strong international relations.

Third, no matter how these variables play out and however they are intertwined, their ultimate effect on Europe depended on domestic factors – the state of EU internal affairs, the level of trust of EU citizens, socioeconomic cohesion, and political unity – in short, on **internal resilience.** When working our way backward from 2030 to the present day, we found that, if there was a divide on a relevant issue within Europe to start with, it became harder for the EU to act in a crisis and easier for external actors to squeeze in and create a permanent gap. If domestic cohesion is high, by contrast, positive developments can be amplified, negative effects can be toned town, and (the old cliché, but never truer than in the disruptive decades of the 2020s) crises can even be turned into opportunity.

Fourth – illustrative of an urgent need for the EU to seize on opportunities for policy *change* – we observed that **the status quo and worst-case scenarios were surprisingly similar.** In the field of security, the status quo scenario sees paralyzed international security institutions: a NATO without the United States, an inactive United Nations Security Council, China militarily preserving its influence sphere, and conflicts over climate change. It is hard to imagine much worse than that, but the worst-case scenario nevertheless succeeded in imagining fragmented technological progress fueling climate over-adaptation with disaster ensuing. In the four status quo scenarios, we tended to imagine an EU that was following its current policy course of gaining greater autonomy, closing itself off from the world in a bid to maintain continuity. Moreover, in the scenarios with the *worst* outcomes, we found that this was because the EU had added a geopolitical dimension to its current course, pushing through its autonomous priorities with geopolitical tools and in the face of resistance abroad and at home.

This leads to the **fifth** and final observation on **the role of "chance."** Some of the scenarios relied on chance political shifts that open new perspectives – a Green president of France building climate cooperation with the MENA region together with China, or a new UK Labour government keen to work with the EU in foreign and security policy. Some envisioned a sequence of crises so severe that they need to be tackled jointly – such as coastal flooding that threatens not one but multiple nuclear meltdowns in China's power plants – and whose successful management reignites desire for multilateral cooperation. Conversely, some of the scenarios see events that unleash a negative domino effect, such as the dispute over the attribution of a cyberattack that ultimately breaks up NATO. The key takeaway here is that it is neither seemingly random events nor linear structural developments that determine in which position the EU finds itself in 2030 – but rather action.

And so, to the feel-good part: developments are not inherently bad or good; and the severity of a crisis does not necessarily lead to a worse outcome. Instead, it is by the EU's own action, at home and with other powers, that it can forge new paths and define outcomes. Europe's investment in a capacity to act – building a capacity to *react* to external developments, *act* in the face of pressure, and *shape* its environments – will determine whether its reality in 2030 will come closer to a worst-case or a best-case scenario. And, across the scenarios, that meant upfront investment in domestic and international dependencies and cohesion. Europe's future is in its own hands.

The only trouble is that such open-ended investments are becoming harder and harder to make in today's world. And yet, the EU has a long history of carefully using connectivity and markets to build cohesion and "domesticate" the sources of conflict and crisis – a history that is being blanked out in Paris and Berlin amid calls for Europe to "become" geopolitical. Proponents of this agenda paint the EU's past use of markets and economic interdependence as naïve in order to justify it now closing itself off and trying unilaterally to regulate globalization. As such, they risk ignoring the real path of EU history, which was one of reinvention and mixing and matching competencies across different policy fields. It is this long history of geopolitics that the EU successfully tapped to achieve best-case outcomes.

Left Blank on Purpose

Technology in 2030: Innovation Before Regulation

As part of our research project to assess whether the EU is on the right course for 2030, this chapter looks at **technology.** By envisioning three scenarios for 2030 – a status quo, worst-case, and best-case scenario – we aim to ensure the EU is properly aware of the implications of continuing its current trajectory, is prepared for the worst, and understands how to achieve the best. While our group of experts has created scenarios based on multiple dynamics for us to use as a benchmark to monitor the EU's progress over the next decade, we have cherry-picked a single one for this report and pulled out two of its key variables. The **status quo, worst-case,** and **best-case** scenarios outlined here each combine these variables in different ways and challenge the usually assumed cause-effect relationship between them, thereby highlighting new policy options that break old path dependencies in Brussels and Berlin.

Today's EU evidently believes that its regulatory clout is the primary means through which it can influence how digital technologies are used in the future, both in Europe and abroad. Therefore, this chapter presents three plausible scenarios for 2030 that each play out around two factors: the **way the EU deploys its regulatory power** and **the global use of technology for geopolitical purposes.** These factors reveal something unexpected – namely, European *innovation* is what matters most. The EU cannot spread its cooperative and democratic form of order without innovating because its standards will mean nothing if its digital technologies are not taken up abroad. Simply leveraging the EU's market size and the access of foreign-owned technology firms to EU consumers is an ever-diminishing form of power. Our scenarios demonstrate that the EU's strategy of being first mover when it comes to regulation – on data protection, social media platforms, and artificial intelligence (AI) – too easily impedes its ability to innovate. If the EU continues to focus on a defensive regulatory policy, it will not only suppress innovation but also create negative knock-on effects for its whole foreign policy.

When it comes to the first factor – the way the EU uses its regulatory power to assert its standards internationally – the **status quo scenario** sees the EU quickly expanding its regulatory depth and reach through new tech rules, consciously joining a global geopolitical battle to assert a liberal democratic tech space. However, its model of "democratic power" is top-down, and it chooses which businesses to support based on reasons of grand strategy. In the **worst-case scenario,** the EU wisely focuses on building up trust among polarized EU citizens in order to maintain its capacity to regulate. But it takes a geopolitical approach, and its heavy focus on combating disinformation and hybrid threats only ends up distorting the European public sphere, deepening mistrust of technology and the state. Finally, in the **best-case scenario,** the EU concentrates primarily on ramping up investment and citizens' adoption of tech, rallying Europeans around flagship innovation initiatives such as the crypto euro of the European Central Bank (ECB), the Mars mission of the European Space Agency (ESA), and the Gaia-X infrastructure project led by Germany and France.

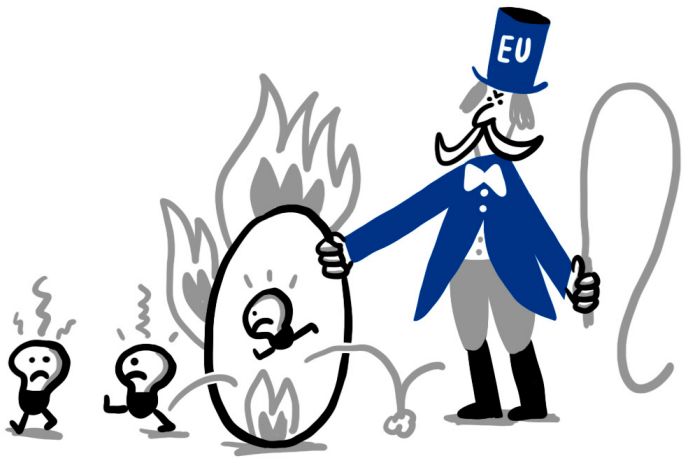
Regarding the global geopolitics of tech, the **status quo scenario** sees the United States toggling between internationalism and populism. Early cooperation with the EU around establishing democratic rules for the game soon gives way to tech protectionism and tit-for-tat retaliation. When the United States again moves back toward internationalism, it then cooperates on the rules of the internet and digital technology with an innovative China rather than a defensive and unresponsive EU. In the **worst case-scenario,** China emerges as the world's tech innovation hub and, for commercial reasons, is supportive of EU attempts to create a stable and cohesive regulatory space. As the European Digital Single Market fragments under polarizing political tendencies, however, China creates a "Beijing Effect," harnessing its latest innovations to spread Chinese standards in Europe. The **best-case scenario** envisions cooperative solutions between great powers in the wake of infrastructure attacks in the United States and China. As Washington and Beijing recognize that their "Tech Cold War" is mutually debilitating, multilateral digital governance initiatives are revived. Both the EU's innovative technologies and its nimble rules are adopted or mirrored abroad.

WHAT TO WATCH OUT FOR – TAKEAWAYS FOR POLICYMAKING TODAY

Is the EU properly braced for the **worst case?** This second scenario imagines, not implausibly, the dissolution of the EU's ability to regulate at home as it is pried apart by aggressive outside powers – all but ending its shaping power. China would not be able to achieve this kind of divide and rule were it not for the underlying tensions in Europe, ev-

idenced by a significant rise of populist nationalism. China exploits the divide, not only by supplying tech to private consumers but also by pulling groups of EU countries into its tech governance sphere. But, importantly, China starts to act in this aggressive way only when it perceives that Brussels has forfeited the trust of European consumers. Therefore, this scenario shows that diminishing the (digital) divides across Europe is the way to supply the necessary resilience to withstand crises. The EU's post-COVID-19 industrial policy decisions will inevitably prop up old champions, but they must also create a landscape supportive of innovation in small and medium-sized enterprises (SMEs) across the EU.

How might the EU work toward the **best case?** In this scenario, the EU adopts a balanced approach to regulation and sparks innovation by means of a limited number of successful flagship projects. These innovation initiatives produce globally competitive technology and digital services – as opposed to heavy-handed regulation or efforts to crown industrial champions. These competitive technologies, in turn, spur the development of innovative European tech norms, which allow the EU to take advantage of the change in global mood: a new win-win attitude toward cooperation in tech in the wake of severe crises. However, one key factor contributing to public support for the EU's tech initiatives should not be forgotten – namely, that the digital divide among EU countries is bridged. This scenario strongly suggests that societal trust in and understanding of technology are at the core of the equation: The public and private sector jointly build rules, invest in education, and use tech to drive areas such as health and sustainability.



STATUS QUO SCENARIO: THE EU'S AUTOCRATIC MODEL OF DEMOCRACY

While the EU expands the ambit of its tech regulations and builds a nuanced framework of tech rules in this scenario, this does little to get domestic innovation to take off. That matters because its efforts are made against the backdrop of a global tech boom. The EU's attempts to create homegrown alternatives to US and Chinese technologies fail primarily due to a lack of adoption in Europe – something its rule-making was meant to address. By 2030, the EU's relative market size shrinks and, with that, its regulatory reach. Its top-down, ideological model of democracy promotion in the technological sphere suppresses innovation in Europe.

The EU's Innovation Cannot Keep Up With Its Regulatory Ambition

As 2020 marks the start of a new decade, the EU recognizes that digital technology will be the frontline in a global competition between liberal democracies and autocracies. Keen to protect European citizens, the EU makes full use of its market power to set its own ethical liberal norms for AI, cloud computing, industrial data, platforms, and competition. Landmark regulatory frameworks follow. In 2022, the European Digital Markets and Digital Services Acts come into force in record time. In 2023, two major revisions to the 2016 General Data Protection Regulation – an updated "GDPR 2.0" and specific new regulations on personal data and ethical algorithms for AI – are implemented. Large, non-European tech firms welcome these efforts because they are seeking precisely this mix of high standards and political predictability – and, so, start applying EU norms to their global operations. True, large US firms push back at the European Commission's widely trailed intention to break up GAFAM (Google, Apple, Facebook, Amazon, and Microsoft) in Europe. But Chinese platforms, which have a smaller share of the EU market, readily take on European market standards.

Buoyed by this successful "scaling up" of EU democratic standards in what everyone in Brussels agrees is an unprecedentedly hostile geopolitical situation, EU regulators make ever more robust tech norms on behalf of European society. But this overconfidence and sense of mission cloud their judgment, and their early successes do not last. EU lawmakers label more and more fields of technology as strategically important for Europe. They attempt to protect European data flows and information and communications technology (ICT) infrastructure. But the effect is to cut the EU off – even from neighboring world regions. The Franco-German-led attempt to create a federated Euro-

pean data infrastructure, the Gaia-X project, fails because it becomes too detached from its business, consumer, research, and international stakeholders and simply does not align with the public interest. Most problematic of all, bureaucratic rules impede start-ups, with knock-on effects for the stream of new technologies to Europe's industrial giants. The EU's share of the world's gross domestic product (GDP) dips below 15 percent, a decrease of more than 5 percent in just 10 years.

The EU as a Shrinking Global Partner

In 2021, the EU wholeheartedly supports the "Summit for Democracy" convened by a Democratic US administration and bolsters the summit's ambition to create multilateral initiatives to build democratic technical standards. However, given the huge geo-strategic stakes, Brussels and Washington each believes the other should subordinate its tech model to it. Their joint norms remain confined to small parts of the enmeshed transatlantic tech space – and the only thing that the United States and EU do enthusiastically cooperate on is naming and shaming autocracies. Therefore, the summit's after-effects are neither sufficiently weighty nor inclusive enough to sway China. And this debacle for an internationalist US president's diplomatic ambitions helps put an isolationist in the White House in 2024. This new US administration stirs xenophobic sentiment in America and, when barring foreign firms from its market, does not differentiate between Chinese or European tech products. Indeed, the EU is said to be the enemy of US Big Tech, intent on breaking up its sheer size, which is said to be the very source of America's tech superpower in its grudge match with China.

The global regulatory environment splits into two big blocs and a third, smaller one – around the United States, China, and the European Union, respectively. In response to the near-complete US market foreclosure, China bars all outside usage of personal and industrial data from the United States. But to justify these protectionist ends, Beijing adopts the language it learned from the EU in the early part of the decade – it cites, for instance, insufficient US data protection. As they close themselves off, each of the three markets sees technology as a domain of national security. They all accelerate investments into autonomous domestic AI, high-performance computing, and quantum technologies. The paradoxical effect of market closure is thus to fuel a global tech boom. In 2030, the global stock market also booms and the winners are tech companies from China and the United States – especially the Chinese internet-based companies Tencent and Baidu followed closely by the US leader in AI, Nvidia. When the United States finally veers out of isolationism and toward a further attempt to create a new international rules-based order, it works with a highly innovative China this time rather than the sclerotic EU.

The EU Turns Into What It Fears

The attempts early in the decade by legislators in France, Germany, and Brussels to pick "flagship democratic technologies" on behalf of European voters is sadly removed from real public demand. The EU is shaping its industrial policy along lofty ideological grounds, but, given the choice, European voters in fact pick up and adopt technologies that are made in the United States and China. Competition between the US and China – the two "tech workshops of the world" – is heating up thanks to their consumer-friendly approaches. The Chinese share of the global market is increasing thanks to the comparatively cheap systems it offers, which are snapped up by EU consumers, particularly those in regions hit hardest by a slowing EU economy. The EU's top-down model of democracy leaves it prey to US corporate muscle and Chinese state capitalism. While Europe's public sector-led tech initiatives fail to take off and appear inefficient, its private-sector tech is viewed increasingly critically – for its role in mining data and its insufficient containment of digital surveillance in markets outside Europe.

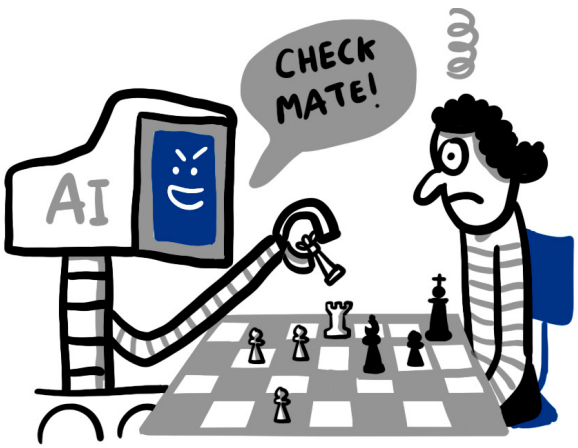
Despite a tech boom that has reached virtually every corner of the globe, Europe finds itself increasingly caught in between the two big players, both of them growing as they bite into the EU market. Because the United States and China view control of the EU market as the "global kingmaker" to achieving tech supremacy, the EU finds itself staving off an increased number of foreign takeover bids on European companies. Its weak position makes its few small contenders and then even its old champions ripe for the picking. Starved of a local innovation stream, Europe's former prowess in engineering-driven manufacturing fades, and EU industrial champions struggle to adapt to the demand for user-driven smart devices. Europe's Daimler is taken over by China's Baidu in 2028; and Volkswagen – soon to be grimly rebranded as the Chinese People's Car – is next on the menu. The EU is not invited to the table when China and the United States declare a stalemate and agree to draw up the new rules of the game between them. The EU's top-down model of democracy even leaves its citizens receptive to autocratic norms from abroad.

Stocktaking: Lessons Learned from 2030

In an increasingly securitized tech environment, the EU's industrial policy efforts during the 2020s were too ideological and heavy-handed; its few homegrown tech applications were not even picked up by consumers and businesses in

Europe. It focused on shielding its legacy industries from outside competitors, trusting too much in the incumbents to envision the disruptive innovations of the future. But this stifled start-up businesses, and the EU ended up making those legacy industries vulnerable to hostile takeovers. Its response to the growing geopolitical stakes was over-regulation, which further dampened Europe's potential for domestic innovation. In the long run, the shrinking EU market lost its position as a global actor and regulatory entrepreneur, and a lack of cohesion and diminishing level of trust in public-sector tech inhibited its natural advantages. There are lessons for how the EU might avoid this negative, status quo trajectory. One is to rethink the EU's efforts to integrate its "new" policy priorities – such as the green agenda, as well as ethical and human rights aspects – into its regulatory expansionism.

Our experts were not convinced that the Commission's pitch for European tech – its unique selling proposition being its ability to shape "ethical" and "trustworthy" tech – is enough to generate a sufficient rate of tech adoption for European products and services to matter globally. Certainly, the EU should continue pushing for such standards, but high demand for accessible US and Chinese products is likely to persist. With a different industrial policy slant, the EU could raise trust in technology not only through regulation but also by harnessing new technologies to ensure everyday benefits for citizens – for example, by investing in smart healthcare solutions to navigate the post-pandemic world or supporting its multilateral environmental efforts by investing in green technology. In this scenario, the EU's efforts to rein in large tech "gatekeepers" did backfire somewhat, but largely because it occurred on ideological and geopolitical grounds. Today, the EU can reduce the oligopolistic power of these companies, thereby reducing barriers to entry for smaller SMEs – and creating space for European firms to innovate in the process.



WORST-CASE SCENARIO: A QUESTION OF TRUST

In this scenario, the European Union again focuses on boosting its capacity to regulate, this time channeling investment and research efforts toward technologies that promise to protect the European public sphere and build trust with voters. But the EU's investment choices end up weakening its ability to handle crises, undermining societal trust, and stunting bottom-up innovation. Early on, politicians single out China as a source of disinformation and hybrid threats, fretting about China's weaponization of the World Wide Web. But China only unleashes a concerted influence campaign when it, too, has lost faith in EU regulators and wants to define their regulatory regime.

EU Elites Buy a White Elephant

In the early 2020s, a slow vaccine roll-out and a third and fourth wave of COVID-19 mutations roil Europe. In Central and southern Europe, governments blame the EU. In the northwest, a rump of centrist pro-European heads of state attempt to reestablish faith in the EU by way of a joint innovation initiative. They blame the surge of populist, anti-EU sentiment on disinformation from China and argue that the lack of an "autonomous European sphere" leaves Brussels vulnerable and diminishes their ability to make and spread rules (the Brussels Effect). In 2024, a Danish "Commission Vice-President for a Sovereign and Prosperous European Industry," along with a faction of Baltic and northern European states, pours euros and political capital into a flagship project – an autonomous European "Satellite Internet Infrastructure." Their intention is good: to reduce the vulnerability of EU internet-based services from external disruption while presenting a disruptive innovation for everyday use by EU citizens and companies. They promise disruption without disturbance. But this – somewhat forced – investment does little that Europe's old fiber optic cables could not and, ultimately, proves to be more vulnerable. Outside powers can now disable the whole EU without knock-on effects for other world regions.

Europe Succumbs to a Self-Fulfilling Prophecy

European governments, lulled into a false sense of security by their satellite system, lag behind on message encryption, allowing US firms to intercept huge amounts of data. US-EU relations take a hit, and large US companies are increasingly hobbled by new European rules that specifically target their strengths. China sees that it can seize the crown of being the dominant global force in technology – providing the majority of critical infrastructure worldwide, supply-

ing the most-used digital platforms, and setting technical standards. It pushes assertively westward, unleashing for the first time a concerted and heavy attack whose target is to undermine trust in European and US tech. Until this point, China has hugely profited from the EU's stability and unity, but these traits are gone. Chinese disinformation efforts, thus, find receptive ears: the EU's policies have failed in what ought to have been their core aim – to encourage Europeans to adopt new technologies. Instead, the constant stream of warnings from Brussels has created mistrust in European and US technology, which stunts domestic innovation. These developments pave the way for the "C Plus" approach now familiar from Africa and Latin America – China plugs itself into the European Union's institutions and downloads Chinese rules. Young Europeans now snap up Chinese apps like TikTok and WeChat.

Brussels Falls Into the Digital Divide

After the COVID-19 pandemic, EU innovation initiatives such as the satellite program only add to the uneven effects of its economic recovery package. Large companies from western and northern Europe continue to dominate the European tech market, while SMEs, start-ups, and research centers in lower wage areas of the EU struggle to access resources, investment, and human capital. European efforts in the regulatory sphere prove to be simultaneously stifling for further innovation and toothless for truly reducing the market power of dominant companies. The EU's digital single market begins to fragment because rule-makers focus on securing their regulatory power and neglect technological innovation. All this widens the digital divide in the electorate and eventually undermines any future rule-making. Because populist-governed member states like Poland take a hawkish line on China while populist governments such as Italy's argue for rapprochement with Beijing to access its cheap tech, the EU finds itself unable to act. Paralyzed, elites from the EU's northwest are unable to deliver on their priorities, reinforcing citizens' skepticism. By 2030, right-wing parties gain significant margins in German and French elections.

Stocktaking: Lessons Learned from 2030

In this scenario, Brussels engaged in exaggerated "policy solutionism" – going into policymaking overdrive as if the solution were merely showing that it can set norms. The EU relied too heavily on regulation as the basis of its capacity to act instead of trusting in innovation and enhancing competitiveness to strengthen its shaping power. This led the EU to make investment choices that support elite voices, only worsening centrifugal political forces. Its former proficiency in crisis management has been equally lost. Its one-off risky attempt to invest in satellite infrastructure has backfired, further eroding citizens' trust in the EU's ability to steer them through the next technological decade. China was able to push into the existing technological and socio-economic divide, perpetuating a vicious cycle out of which the EU was unable to break, in which its faint efforts to encourage innovation were toothless, its regulatory power no longer applied, and, as a result, its population was less and less convinced of the EU's benefits.

However, this scenario also illustrates some blind spots that may yield opportunities. If the transatlantic relationship declines, for example, the EU has options. It can invest in new alliances, including with countries of the Global South. It can also position itself, once more, as a normative power striving for an ethically and equitably regulated tech world – by not only working with civil societies abroad where authoritarian regimes have rigorously diffused Chinese surveillance and law enforcement tech but also positioning its homegrown tech on global markets with their unique selling propositions. First, this approach could result in human-centered AI applications and health solutions with secure and safe data usage, the dimensions of which could be more boldly advertised by the EU to the outside world. Second, it can harness discontent with China's "strings-attached" cooperation in countries of the Belt and Road Initiative (BRI). This discontent could emerge in countries that accumulate debt or grow wary of deals in which a majority of rare earth supplies, which are relevant for high-tech production, is sent to China.

BEST-CASE SCENARIO: THE EU RAMPS UP INVESTMENT AND RALLIES EUROPEANS AROUND FLAGSHIP PROJECTS

In this scenario, the EU is able to maintain its regulatory power and use its innovation potential to back cooperative projects. As digitization and tech adoption take off in the aftermath of the COVID-19 pandemic, the EU picks up reforms that free investment. Importantly, these reforms enhance societal trust by both improving tech infrastructure coverage and implementing ethical regulation. Internal cohesion grows, populism decreases, and the EU gains new capacities for nimble norm-setting. Key innovative undertakings, such as Gaia-X, the ECB's digital euro, and the ESA's Mars program, build both trust in technology at home and European prestige abroad. Two severe cyber crises spur momentum for international cooperation, and the EU is well placed to capitalize on a new win-win attitude among big powers in multilateral fora.

Balanced Regulation and Innovation Breakthroughs

By 2030, the EU is a fully-fledged technological peer of the United States and China, matching them in the number of essential patents and unicorns,[20] rates of venture capital, and attractiveness for ICT talent. Driven by the societal embrace of digitization in the aftermath of the COVID-19 lockdowns, both technological adoption and investment in homegrown tech increase. A Europe-wide pension fund reform in 2022 allows more investment in start-ups. The Digital Single Market is completed by 2024, flanked by worker mobility measures attracting highly skilled labor to the EU. The EU has gone beyond regulatory-style reform with a number of flagship initiatives. These include the "digital euro" launched by the ECB in 2022, the Mars exploration program launched by the ESA in 2023, and breakthroughs in quantum technologies. The Franco-German-led Gaia-X project becomes a triumph of clever political-technological design, providing the basis for an interoperable, secure cloud infrastructure – a federated system that has enabled a wide range of new services and providers through healthy competition. The system is adopted in third countries. As a result, other EU standards such as the "GDPR 2.0" are copied, giving EU tech companies a competitive edge.

Crises Spur Multilateral Tech Cooperation

In the run-up to 2030, the United States, China, and the EU recognize the risks of a potential "Tech Cold War." In its place, a cautious mood of cooperation emerges among them. This switch toward cooperation is produced by a series of major crises. A sequence of severe cyberattacks disrupts all of their communications infrastructures. After a hiatus in which all three feel they have improved their resilience, a severe cyberattack hits a US nuclear plant. Experts from the EU and China offer to step in to help prevent a nuclear meltdown; their offer is rebuffed in Washington with obviously negative ramifications. As a result of the lessons learned from these crises, the EU, United States, and China engage in mutual reassurance as well as joint standards that facilitate communication and data flows between continents. Thanks to a new era of digital diplomacy, the International Telecommunication Union is revitalized and expanded to become a UN Digital Agency whose standard-setting prowess means it begins to supplement the United Nations' slow-moving and expensive "analogue agencies." In the wake of a global digital trade agreement, private companies from the EU, US, and China feel able to collaborate. An alliance among Huawei, Nokia, and Broadcom enables the deployment of high-speed 6G mobile internet, going some way to overcoming the global digital divide.

The Digital Divide is Bridged and Trust Reestablished

Thanks to this innovation drive and the Digital Single Market initiative, the digital divide across Europe is finally bridged. Fiber connectivity is available for all companies and private households and high bandwidth and low latency are standard. By 2029, broadband penetration has reached 99.9 percent, and 5G is operational in both rural and urban areas throughout Europe, further driving innovation and new business models and helping Europe play to its strengths in the Internet of Things, robotics, health, mobility, and gaming. As a result, overall political cohesion increases, and the EU is able to set rules quickly. Although technological breakthroughs are vast, society is not overwhelmed by disruption or data overload. Thanks to digital uptake, education has kept up with the needs of a new tech economy, labor laws have been adequately adapted, and new technologies such as AI are subject to appropriate and ethical regulation, supporting everyday life. Governments and private companies have worked together to raise levels of trust. New opportunities emerge through investment in innovative technologies, including those related to global greening and the vanishing divide between the EU's north and south.

Stocktaking: Lessons Learned from 2030

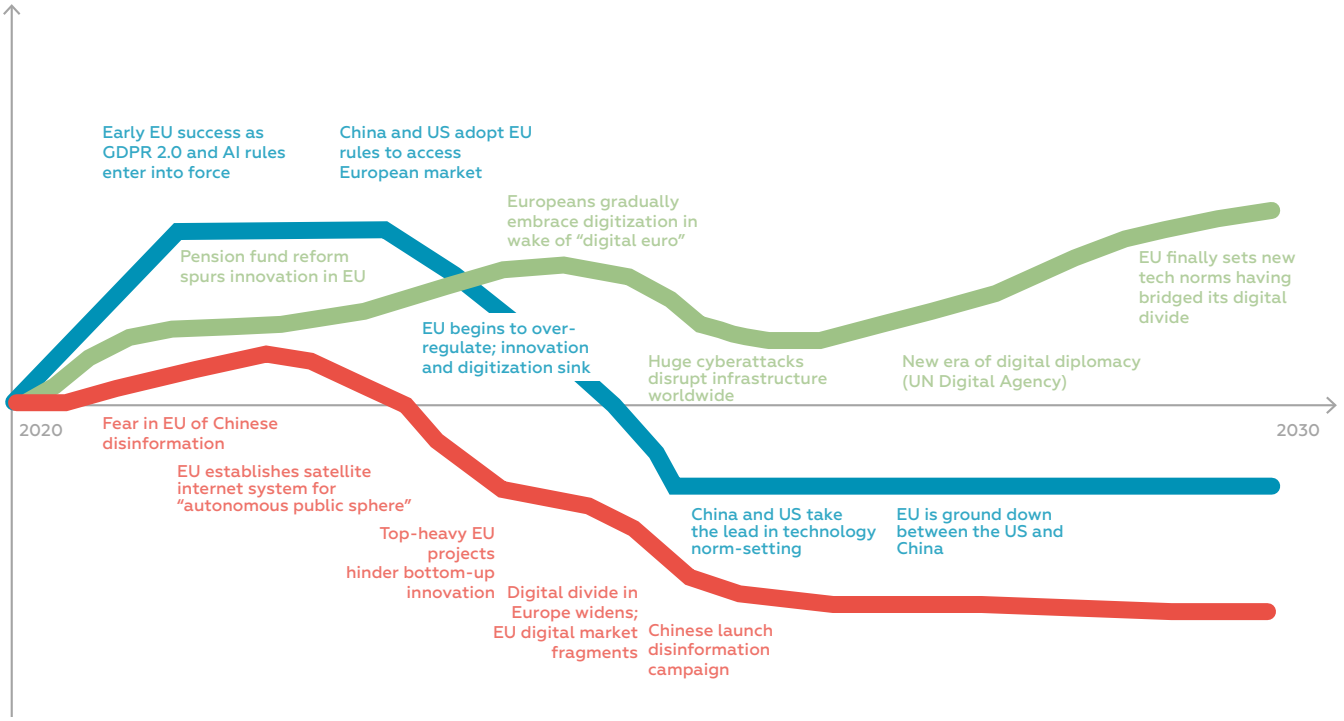
Viewed from 2030, it is clear how the right degree of regulation – together with a drive for innovation – can create virtuous cycles. Investing in a number of flagship projects

20 Here, a unicorn refers to a privately held start-up company valued at over $1 billion.

early in the decade fueled the appetite in Europe for EU-grown tech. While it took a number of worldwide crises to dampen global tech confrontation, these crises resulted in swift benefits and offered both political and economic opportunities. Ultimately, the EU's regulatory power – though not asserted by Brussels on as great of a scale as in the status quo scenario – in fact expanded because its initiatives, such as the digital euro and space program, were adopted or admired elsewhere, offering EU tech companies significant advantages. This scenario is also characterized by trustworthy and affordable tech, with infrastructure providing beneficial access for everyone and enhancing EU cohesion. This, in turn, provided new opportunities for European business and freed capital to be invested into much-needed new carbon-neutral projects to feed the EU's green agenda at home and abroad.

Although the sequence of events described in this scenario was mostly highly positive, it might easily have had severe downsides. The scenario required high-risk behavior to achieve its positive outcome. This scenario relied on the rallying effect of successful flagship initiatives. These achieved buy-in for the EU and its tech companies by impressing consumers and governments. But success hinged on these initiatives actually taking off; a significant failure over the course of this decade might have had a reverse effect. Similarly, this scenario saw a high degree of societal acceptance of new tech, in which the benefits of an eased digital divide and balanced regulation created trust. But unprecedented degrees of technological disruption might just as easily have yielded a backlash against new types of tech-driven business models. Furthermore, the upsurge in innovation in the tech sector might easily have had an adverse impact on certain industries that were left behind, creating a challenge to EU cohesion. Finally, the cooperation in this scenario was catalyzed by major crises, leading initially to chaos, disruption, and mutual distrust. Only because the EU, China, and the United States were sufficiently resilient were they subsequently able to work together.

1. OVERVIEW OF THE TECHNOLOGY SCENARIOS



Source: Authors' own work

Geo-Economics in 2030: How the EU Can Squeeze Out From Between the US and China

As part of our research project to assess whether the EU is on the right course for 2030, this chapter looks at **geo-economics.** By envisioning three scenarios for 2030 – a **status quo, worst-case,** and **best-case** scenario – we aim to ensure the EU is properly aware of the implications of continuing its current trajectory, is prepared for the worst, and understands how to achieve the best. While our group of experts has created scenarios based on multiple dynamics for us to use as a benchmark to monitor the EU's progress over the next decade, we have cherry-picked a single one for this report and pulled out two of its key variables. The status quo, worst-case, and best-case scenarios outlined here each combine these variables in different ways and challenge the usually assumed cause-effect relationship between them, thereby highlighting new policy options that break old path dependencies in Brussels and Berlin.

Geo-economics involves states using levers such as their control of natural resources and new technologies for narrow strategic advantage. It is something the European Union and United States have tamed in the past, wielding their market power to shape a global trading system in which even competitors share access to resources and innovations. But that system is being tested by US-China antagonism – at just the moment when technological and environmental changes unleash huge challenges. Therefore, this chapter presents three plausible scenarios for geo-economics in 2030 that each play out around two factors: the **character of US-China interaction** and **access to resources and new technologies.** This reveals something unexpected. We show that, whether the pair cooperate or compete, the EU can still be frozen out of access to resource and tech. (Two obvious examples being a cooperative "G2 arrangement," in which China and the United States sew up the global economy bilaterally, and a competitive G2 arrangement, in which the EU is stuck in between the US and China). Consequently, the EU has a vital interest in shaping a trading environment that – regardless of whether big states cooperate or compete – contains strong mechanisms for the diffusion of resources and innovation.

The first factor we explore is the style of US-Chinese interaction. In the **status quo scenario,** the United States and China compete aggressively. Each initially seeks to leverage the current trading system, but this robs the existing multilateral system of its raison d'être. The historical advantages of the United States are eroded while China's wide-ranging "infrastructure diplomacy" leaves it well positioned to spread its rules in the emergent fields of information and communications technology (ICT) and renewable energy. The EU is split between the familiar norms of a weak ally and the new obligations of an emergent challenger. The **worst-case scenario** foresees a far more cooperative international environment – one based on China emerging as the sole global superpower, and the US pressed into cooperation. Fearful of disruption and overstretch, this China promotes a cautious and oppressive model of trade. The EU finds itself drawn into China's regulatory ambit. In the **best-case scenario,** the United States and China cooperate but not in a collusive "G2" manner. Issue-specific policy alliances emerge, and intellectual and industrial leadership is distributed widely – including to EU members.

Our second factor is access to resources and innovative new technologies. Although global innovation is high in the **status quo scenario,** the EU is unable to participate in the new breakthroughs. Innovation is driven by competition between two antagonistic blocs – one led by the United States, the other by China – that leverage their control of trade routes and, thereby, access to resources. The EU is doomed to be an innovation-taker, obliged to ally with one or the other – and increasingly split between the two. In the **worst case-scenario,** global innovation is low despite a cooperative international landscape. The United States is recovering from a lengthy economic crisis and no longer innovating. China has free reign to impose cooperation agreements on third parties that contain obligations for Chinese access to their resources and their adoption of Chinese technologies. A fragmented EU duly signs up, limiting its own choices. The **best-case scenario** projects a high degree of global innovation that is evenly spread. A global web of multi-stakeholder networks, which include non-governmental actors such as research institutes and businesses, depoliticizes cooperation on big challenges like climate change and digital transformation and serves to diffuse breakthroughs worldwide.

WHAT TO WATCH OUT FOR – TAKEAWAYS FOR POLICYMAKING TODAY

Should the EU remain on its current geo-economic trajectory, the **status quo scenario** for 2030 looks gloomy. This sce-

nario projects a weak EU that is busy navigating between a highly competitive United States and China in the key fields of ICT and green adaptation. While EU member states do initially enjoy the freedom to pick and choose between the two when it comes to cooperation, each choice has sizeable consequences for the medium term. Stuck in reactive mode, the EU misses the chance to put forward a European model that differs from that of the United States or China – a collaborative regulatory environment prone to innovation in ICT and green industries. By 2030, the EU lacks its own home-grown transformative technologies in fields including energy storage, hydrogen technologies, quantum computing, and artificial intelligence (AI) and loses its leadership, even in established industries like the automotive sector. With the EU caught in a vicious cycle of low innovation and high dependency, internal polarization deepens. Its damaging dependence on China and the United States leaves the EU a weak geo-economic power that is not ready to compete and unable to cooperate as an equal partner.

The EU will be in greater trouble when trying to weather the **worst-case scenario.** It foresees a near-unipolar Chinese-led order into which the United States is being gradually co-opted. By itself, the EU is unable to exert geo-economic influence; yet to link itself to its US ally and decouple itself from Chinese trade in both ICT and energy technologies would only be to back the losing horse. Inevitably, more and more EU countries follow the United States and make their peace with a Chinese-led order that promises a kind of stability and solidarity. They lock themselves into Chinese data-cloud solutions and other highly intrusive infrastructure. A global *Pax Sinica* emerges to offer a cooperative global order, but only once China has thoroughly transformed the EU's entire culture and politics. This dire long-term eventuality once again underlines the need for the EU to build a European model for ICT and green industries. It also puts into perspective the initial retaliation that moves toward such a model could incur – an uptick in the incidence of hybrid threats, cyberattacks, and the theft of intellectual property, as well as an occasionally violent scrabble for resources in the EU's neighborhood.

If the EU is to work toward the **best-case scenario,** it must consider the importance of effective multilateral organizations and global governance platforms as well as the costs of their absence. But – and slightly contradicting this – the prerequisite for this scenario is the EU building an independent capacity to act. Such a capacity necessitates the EU's ability to counter geo-economic warfare and overcome its structural dependencies on third countries for new critical resources. Greater European cohesion and autonomy are not ends in themselves but should help the EU to continue driving multilateral organizations like the World Trade Organization (WTO) to be more inclusive and better at producing tangible outcomes. In this scenario, the EU substantially invests in public-private partnerships to boost digitization and green innovation. Old fault lines – for instance, between the United States and China, democracies and authoritarian powers – are softened by successful issue-specific cooperation on green innovation. India reaches out to the EU, seeing it as a sympathetic partner when it comes to ensuring access to resources and diffusing innovation.

STATUS QUO SCENARIO: IN A HIGHLY COMPETITIVE, HIGHLY INNOVATIVE LANDSCAPE, THE EU STRUGGLES TO SURVIVE

US-Chinese competition sharpens in a scenario characterized by geo-economic power games over rare earths and critical natural resources. Traditional multilateral institutions like the WTO fall short in dispute settlement and standard-setting, becoming a mere playground for great power competition. The EU fails to hedge against the loss of US influence within the WTO through new diplomatic démarches to Asian democracies and autocracies. China, on the other hand, consolidates its strengths in all world regions, including Europe. Because European business is kept busy navigating between US and Chinese sanctions regimes, even European legacy industries like the automotive sector start to misfire.

Multilateral Bodies Are Squashed as the US and China Wrestle

The WTO is mired in disputes with "emerging economies" like China and their claims for greater representation. In 2023, it looks set to get ahead of the problem by securing a mandate to negotiate rules for e-commerce and green technology, focusing on emergent fields in which some measure of equal representation can be ensured from the outset. But China refuses to apply free trade principles to new fields while its old grievances remain. And the United States, falling irrevocably out of love with the WTO, starts acting unilaterally. Washington uses secondary sanctions to crush trade with countries it perceives as too friendly to China and its energy needs – notably, Iran and Russia. China follows suit and uses sanctions to isolate a group of key US allies that has opened full diplomatic relations with Taipei, the semiconductor king. Amid these competing sanctions regimes, any remaining credibility that the WTO had as a forum for dispute resolution and standard-setting evaporates. Smaller countries are the first to feel the effects. Disempowered by the absence of effective collective action structures, they are left to fend for themselves between China and the United States.

As WTO standards break down and the United States and China compete, relative advantage is decided by each superpower's ability to secure critical supplies. The United States cashes in on certain historical advantages – for example, its position as guarantor of the open global economy, in particular through its rules for cross-border trade and finance and the global internet. But China gradually gains advantages via the infrastructure strategy epitomized by its Belt and Road Initiative (BRI). Moreover, the transactional Chinese diplomacy on display during the COVID-19 crisis has become routine in the 2020s, a decade of pandemics and natural catastrophes. When a bird flu epidemic emerges from the Amazon, Beijing provides local governments with aid in return for valuable primary supplies of lithium, cobalt, and graphite – resources that are required to build batteries and electrodes and, thus, vital to green innovation. China cements this with investments in green infrastructure, helping Latin American governments adapt to the demands of a 2021 Conference of the Parties (COP) summit dominated by the United States and European Union. The US regresses from status quo power to spoiler when it tries to stir up local resistance in Central America to China's extractivism.

Innovation is Dynamic – but Decoupled Between China and the US and Between Green Technologies and ICT

Overall, there is a high degree of global innovation despite the breakdown of the WTO – or perhaps because of it. Innovation is driven by the emergence of two trading blocs that compete for gains and thrive in emergent sectors and the unregulated global environment. Both the United States and China cite raison d'état for taking innovation risks that are sometimes unethical and for developing technologies that are specific to their individual cultures. Their competition leads to the compartmentalization of research and investment, in turn preventing the diffusion of new good practices and shared regulatory standards. ICT innovation and green adaptation become the two fields of prestige and power – ICT because the United States is able to harvest vast amounts of data from its legacy internet platforms; climate adaptation not least because China uses its access to Latin American resources to launch a new "green e-mobility" initiative. While the United States funnels dwindling subsidies to ICT firms and cuts back on funding for green innovation, China invests heavily in the development of low-cost electrocars and batteries.

With a global economy increasingly driven by Chinese-style green innovation and energy efficiency, the United States ends any commitment to an open global economy. A new, protectionist administration erects trade barriers in an attempt to safeguard its legacy ICT companies from Chinese competition and directs its efforts toward supporting its domestic oil producers. It is this protectionism that provides the motivation for the United States to instrumentalize sanctions and secondary sanctions: Since assuming power in 2025, this administration has been seeking to isolate rival oil producers in Russia and Iran, as well as erstwhile allies in the Middle East. Collaterally, the US sanctions also serve to put pressure on its own allies to cease busi-

ness dealings with China's satellite states and China itself. The United States also boycotts Chinese green technology in a further move to revitalize domestic fossil energy generation. The impact of this protectionist impulse is global and results in a failure to share innovative responses to problems that require global collective action such as climate change. China achieves breakthroughs in energy transition, but they come too late given that climate change is already highly advanced.

Europe is Stuck Between a Rock and a Hard Place

The European Commission – encouraged by France, Germany, and the Nordic and Baltic countries – tries to keep up with the competing superpowers. It introduces policies to reshore production even from its own neighborhood and creates European champions in both ICT and green innovation. But as the United States uses the worldwide web to harvest data for its domestic tech sector and China sews up global supplies of green resources, the EU finds itself cut off from the resources it needs for domestic production. The EU is increasingly dependent on both actors – the US for ICT innovation, China for green adaptation – and desperately tries to rebuild its international supply and production chains. But, with each attempt, its corporate sector is struck by Chinese and US sanctions. To its own frustration, the EU can clearly envisage the new, uniquely European instruments required to create a distinctive model of collaborative innovation but can no longer achieve sufficient unity to adopt them. Staring defeat in the face, Brussels tries to align the EU with US regulatory standards, seeing the wisdom of hooking into its ICT models, but poorer southern and southeastern member states are attracted by Chinese-led innovations that drive down energy costs. As its southern and eastern neighbors become locked into Chinese infrastructure systems and technologies, so too does the EU.

The EU is still capable of competing with the United States and China thanks to a few incumbent advantages. The field of e-mobility is fertile ground for technological breakthroughs, and the EU has a huge legacy advantage thanks to its automotive sector. But this advantage, too, is gradually eroded by its inability to access resources as well as diverging risk cultures in its member states, and lengthy, state-heavy coordination processes. The German automotive sector thus fails to move from engineering and precision technology to user interface and systems-driven tech. By contrast, China, just three years after launching its "green e-mobility" initiative, sees its efforts pay off with a breakthrough in battery technology in cooperation with a Brazilian firm. While China's innovation in energy storage crowns its global leadership role in green adaptation, Europeans cannot even reproduce technologies that build on Chinese breakthroughs. That is because, although Beijing makes a great show of opening up the patents, it simultaneously restricts the EU's access to resources vital for their production. The EU fails to carry over its legacy advantage into a new phase of industrialization, having cut itself off from human and natural resources even in its own neighborhood.

Stocktaking: Lessons Learned from 2030

Facing fierce competition for supplies of primary goods and resources, the EU proved itself a weak contender. Although the European continent is poor in key natural resources, Brussels nevertheless tried to gain autonomy and competitive advantage by reshoring production. By contrast, China, despite being relatively resource rich, invested in partnerships and forged strong interdependence. These activities reached into Europe's neighborhood, and Beijing capitalized on the fact that the EU had regarded its surroundings as more of a threat and less of an opportunity for too long. Decreasing intra-EU cohesion and capacity to act were the logical results – and these meant it failed to divert from this trajectory. The EU should really have used the inward orientation of the United States and the weakened structure of multilateral institutions like the WTO to break from past path dependencies and locked-in relationships and alliances. This would have given the EU a chance to build new coalitions and partnerships and ramp up cooperation on obvious thematic challenges like ICT innovation and green transition.

In short, the EU had an opportunity to make the best of an unfortunate situation, moving out of its comfort zone of muddling through and piggybacking on the United States. It might have built up a larger circle of like-minded countries with access to critical resources and human capital, including Australia, Canada, and Japan, not to mention the countries of its southern and eastern neighborhoods and traditional European partners across Latin America and Africa. If EU member states had invested in an open and collaborative model of production and diversified their international relationships, they could have built on the EU's existing reputation as the normative leader in the ethical application of new technologies and fighting climate change and created entrepreneurial international institutions. By diversifying its relationships, Europe could have rendered itself less vulnerable to US-Chinese confrontation, in turn reducing its need to act as a collective when it came in contact with other powers' technologies, innovations, and standards.

WORST CASE SCENARIO: TO ACCESS NEW TECHNOLOGIES, EUROPE IS DRAWN INTO A CHINESE SPHERE OF INFLUENCE

China is permitted to evolve into an unrivaled global superpower, combining supremacy in the field of ICT and control over resources critical for the green economy. A United States that never properly recovered from COVID-19 retreats from multilateral governance and reaches an accommodation with Beijing, driving one EU member state after another into China's arms. Global governance structures like the WTO simply cease to matter, except as fora for China to radiate influence. Under heavy financial pressure, member states propose severe cuts to EU funding; as a result, disintegrative tendencies grow. Europe opts for a closer alliance with China, robbing the EU of any remaining credibility as a liberal regulatory power.

Regional and Global Institutions Are Subject to Chinese "Venue Shopping"

The United States never recovered economically from its "long Covid" and is struggling to uphold American representation in the WTO, Bretton Woods organizations, and beyond. An opportunistic Beijing has been out "venue shopping" – not only in the usual sense of looking around for the best institutional venues to achieve its policies but also actively buying allegiance. As the WTO loses the active backing of the United States, it becomes dependent on Chinese budgetary support to maintain its secretariat. A similar dynamic also comes to define regional organizations like the Economic Community of West African States (ECOWAS) or the Intergovernmental Authority on Development (IGAD) in the Horn of Africa whose policy output is soon strongly intertwined with BRI structures and standards. The US-led G7, by contrast, simply melts away when China unleashes sanctions on Australia and New Zealand. The G7 grouping, formerly labeled the "Economic NATO," never had a secretariat, legal personality, or even official membership – and it shows. Over the heads of its allies, the United States now finds itself reaching a cooperative accommodation with China. China asserts its supremacy over global investment, trade, and economic rule-setting without a struggle.

Innovation Remains Low and Compartmentalized Despite a Cooperative US-China Regime

The replacement of the WTO system by a G2 arrangement puts a dampener on global efforts to share resources and innovation. The United States lost its appetite and capacity to innovate long ago. In the early 2020s, US internet platforms cracked down on the alt-right. These political radicals simply resorted to low-end closed subscription platforms to organize a backlash. When they rampaged through the Googleplex in Silicon Valley, seeking out "Asian programmers," they dented the attractiveness of the United States as a destination for highly skilled tech workers. Shanghai has become the world's alternative tech Mecca. Its major selling points are a top-notch infrastructure, ample supplies of state capital, and the lack of ethical constraints on innovation. But Shanghai encourages innovation only enough to cement China's global hegemony and never so much that it might disrupt stability. China generously rolls out 6G infrastructure to Russia, Central Asia, and the Caucasus, complemented by "cooperation" agreements cementing a totalitarian "Industrial Internet of Everything." This is "tech trap diplomacy" – China giving technologies away at cost price but then straight-jacketing recipients into new systems. At the end of the decade, almost despite itself, China achieves a breakthrough in quantum computing and, typically, sees this as a way to control the pace of global change.

A Fractious Europe Finds Unity with China

US society is polarized, the G7 states have scattered, and the EU is divided. In this context, Western states find the stability and certainty provided by China attractive. Some EU member states – including the New Hanseatic League consisting of the Netherlands, the Baltic and Nordic states, and Ireland – remain hawkish toward China, but they alienate their closest partners by advocating an 80-percent reduction of funding for EU Common Agricultural and Cohesion policies. Societies in poorer, geographically pe-

ripheral EU states begin looking eastward for access to resources and cheap tech and take up the offer of Chinese friendship. One after another, Hungary, Italy, Malta, Bulgaria, Romania, Croatia, and Greece opt into the BRI digital network and China's "integrated Balkan innovation hub." By 2027, Greece is openly saying that it is impossible to maintain close ties to both China and the EU given their regulatory differences. It debates GREXIT. These moves are greeted with horror by hawkish states like Czechia and Poland, but, having lost faith in an EU model of cooperation, they push for a return toward national priorities. In 2028, a slim majority of member states proposes to find a way to harmonize the EU single market and the Eurasian Economic Union, now under unofficial Chinese leadership.

Stocktaking: Lessons Learned from 2030

In this scenario, the EU hastened its own marginalization through both its hesitancy and dependency on China for stability, solidarity, and cohesion. Scared by the perspective of being shut out from global ICT infrastructures and not achieving sufficient breakthroughs of its own in green innovation, the EU quickly gave up on its own ambitions in innovative research and development and began to disintegrate before being reassembled and stabilized along Chinese lines. More and more EU member states preferred the outlook of China-led global stability at the expense of liberal values and standards. The decision by a group of wealthy, hawkish, liberal member states to punish their poorer counterparts for adopting Chinese technologies by withdrawing funding from intra-European cohesion policies backfired badly. In a Chinese-led world, the EU remained a relevant actor but only by adopting Chinese standards wholesale.

Countering the Chinese tech trap required the EU to take decisions of strategic importance more quickly and in a less risk-averse fashion. Only then could the EU have built on its traditional industrial strengths and achieved breakthroughs in areas like biotech, green energy, or health tech innovation. European success stories would, in turn, have made it easier to attract capable human capital to the EU, with migration establishing itself as an opportunity not a threat. Moreover, European countries needed to invest greater resources and diplomatic efforts into effective international organizations and resilient, diversified partnerships with like-minded countries. Beyond the United States, such efforts ought to have included not only Europe's neighborhood but also countries like India, Japan, Canada, or those in Latin America – just as in the previous scenario. To achieve all this – from the capacity for nimble decision-making to the openness to a full range of outside players – it needed to invest in EU Cohesion and Structural Funds.

BEST CASE SCENARIO: A COOPERATIVE WORLD ORDER BASED ON GREEN RULES

The use of coercive geo-economic levers is minimized by the spread of issue-specific cooperation platforms. Incentives for international cooperation are carefully ramped up by stakeholder coalitions. Topics insulated from great power competition – such as the resilience of global value chains for climate adaption – build interest-led cooperation between the United States and China. Businesses and researchers play a crucial role in facilitating the diffusion of ICT and green technologies. This positive experience spills over to other areas of trade. In the aftermath of the COVID-19 pandemic, the EU heavily invests in strengthening European resilience and intra-European cohesion, allowing it to build domestic – and then global – coalitions.

Enhanced Multilateral Responses Encourage Innovation – with India at the Center

Amid a slow global recovery from COVID-19, resource-rich countries across Africa and Latin America had been banking on a new commodities "supercycle" fueled by a resurgent China and India. Instead, India suffers a series of severe climate-induced droughts and food shortages whose effects ripple out globally, resulting in shortages of critical products. Indian small businesses now frame climate change as the "biggest non-tariff barrier" hampering prosperity. In the shell of the old Indian Congress Party, a new inter-caste green alliance emerges and puts pressure on the government. Its big idea: using crowd intelligence for climate adaptation – green tech married with

open ICT platforms. New Delhi bends to the pressure and, when it hosts the 2023 G20 summit, it pushes for a Global Green Fund (GGF) to encourage green innovation and ICT roll-out. This support for cross-border public-private partnerships is an implicit acknowledgment that the G20's intergovernmental methods have failed to resolve the big global issues. India has long blocked WTO reform, but its usual sticking points have dissolved. It can hardly maintain protections on its agricultural sector when its food stockpiling policy failed so badly in the drought; and it can hardly maintain protections on its ICT sector if it wants a new approach to climate adaptation.

Positive Spill-Over Effects from Green Tech Cooperation Toward Other Areas

Traditional conflict lines in the WTO soften and long-overdue reform agendas become feasible. In 2023, the WTO points to the need to deal with new fields such as e-commerce and green tech but acknowledges that the usual intergovernmental negotiations will not suffice. Its secretariat designs a rolling multi-stakeholder approach that goes beyond its usual annual Public Forum and generates new practices and standards over time. A new global alliance for research and innovation emerges, which grows in members – soon also including Chinese companies afraid of missing out on cooperation opportunities. It helps, of course, that Chinese President Xi Jinping has to step down in 2025 citing health reasons. His exit may be more than coincidental, however, since the Chinese Communist Party felt him to be out of step with the new global mood of cooperation. The new Chinese leadership begins to look upon multilateral frameworks as something more than just a means to project its domestic order. In 2026, the New Delhi round of WTO negotiations on sustainability and digital rules starts. In it, China is finally willing to move forward in reforming the system of industrial subsidies. Four years later, negotiations on resource access and innovation are concluded.

The EU Establishes a More Open Form of Geo-Economics

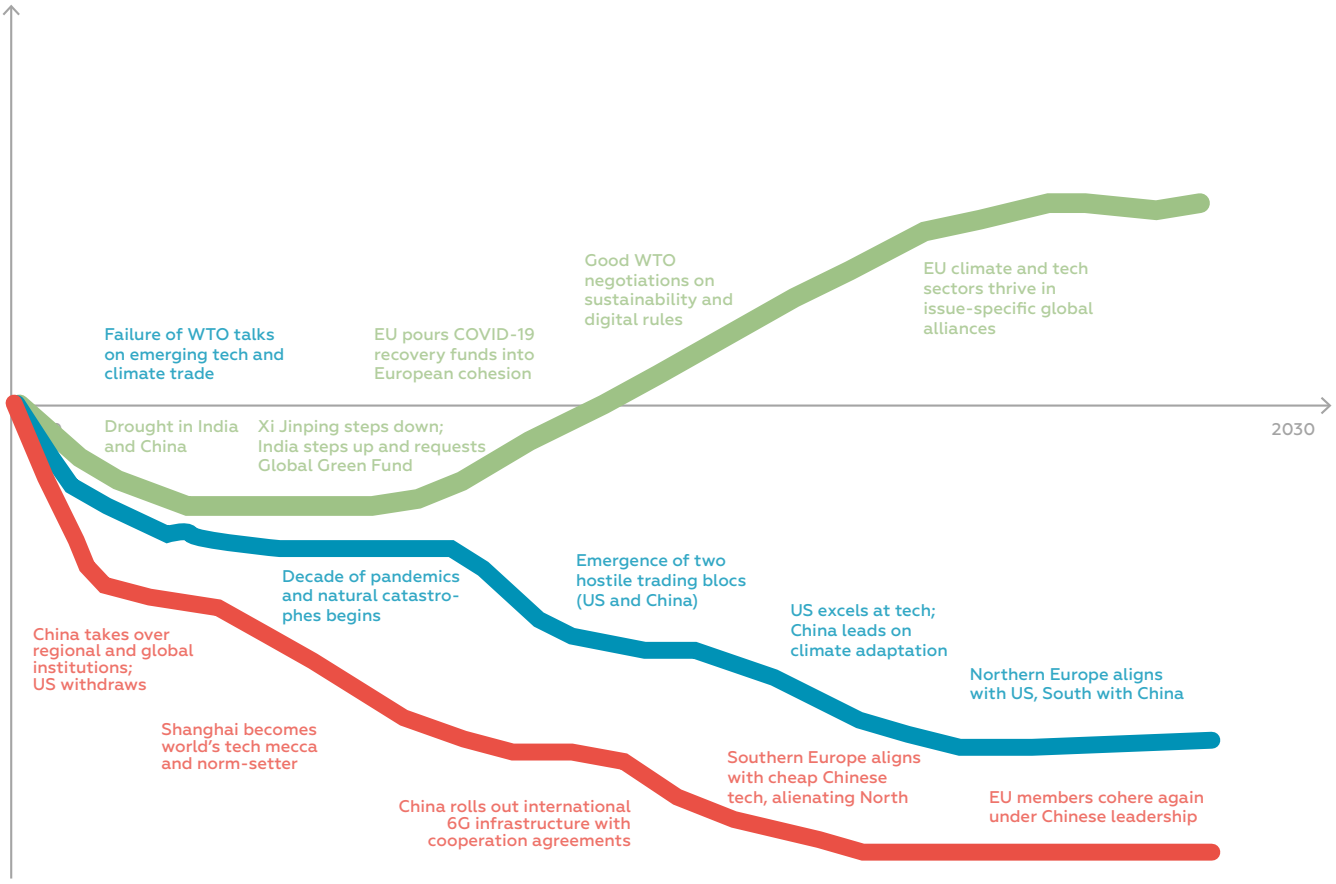
In the aftermath of the COVID-19 pandemic, the EU heavily invests in strengthening societal resilience and cohesion. This helps it use economic recovery schemes more effectively to speed up the roll-out of its digitization and interconnectivity strategies, as well to create incentives for skilled European workers to return to the EU from the United States and Asia. Tech and green innovation hubs flourish in Central Europe; starting from a low base, they boost local support for the EU. As Central European countries join the euro, they kickstart a debate about how to raise the currency's international status, thereby increasing the EU's heft as a trading power and extending it to financial markets. The reform process starts in 2025 when the EU holds a convention for a new treaty. This convention is followed by a genuinely inclusive consultation process, making not only a proper banking union possible but also the introduction of qualified majority voting on sanctions on states that weaponized the global economy. In 2028, the new treaty enters into force. The year 2030 sees the Tesla Gigafactory outside Warsaw achieve a breakthrough in energy storage technology – the result of US-Polish-Indian collaboration.

Stocktaking: Lessons Learned from 2030

This scenario sees the EU in a strong position, faced with a favorable international environment catering to its strengths. Credible and dynamic multilateral and international cooperation with strong networks of non-governmental actors allowed European countries to adopt intellectual leadership in advancing the digital and green transition. Due to the fact that innovation came from transnational consortiums, including non-state actors from the business and research sectors, smaller European countries like the Nordic and Baltic countries were able to take leadership roles in the green transition and tech innovation despite their limited power capabilities as state actors. The EU also highly benefited from innovation and integration beyond Europe due to open data flows, best practice sharing, and overall high rates of innovation diffusion.

However, even in this positive scenario, climate change-related risks remained high despite successful collective action. Countries like the United States, China, or India were especially at risk of being hard hit and potentially bringing back protectionist approaches. This optimistic scenario shows how crucial domestic factors were to creating positive spill-over logics in international cooperation and how easily they could be reversed, making the international system highly volatile. It is notable how many of the best-case scenarios in this booklet begin with a crisis or severe disruption, and how much of the EU's ability to withstand these crises and adapt in a positive way comes down to its investments in intra-European relations, infrastructure, and societal cohesion. Putting in place this kind of bottom-up capacity to act is apparently important even in fields like climate change – fields where disruptions are easily foreseeable and usually prepared for by top-down restructuring processes.

2. OVERVIEW OF THE GEO-ECONOMICS SCENARIOS



Source: Authors' own work

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The Global Conflict Landscape in 2030: The Imperative of Investing in Security Cooperation

As part of our research project to assess whether the EU is on the right course for 2030, this chapter looks at **security.** By envisioning three scenarios for 2030 – a **status quo, worst-case,** and **best-case** scenario – we aim to ensure the EU is properly aware of the implications of continuing its current trajectory, is prepared for the worst, and understands how to achieve the best. While our group of experts has created scenarios based on multiple dynamics for us to use as a benchmark to monitor the EU's progress over the next decade, we have cherry-picked a single one for this report and pulled out two of its key variables. The status quo, worst-case, and best-case scenarios outlined here each combine these variables in different ways and challenge the usually assumed cause-effect relationship between them, thereby highlighting new policy options that break old path dependencies in Brussels and Berlin.

The three scenarios for Europe's future security landscape play out around two themes: c*limate change* (specifically, how states respond to the potential of **climate change** to drive both innovation and conflict) and **security cooperation** (how the major powers treat multilateral cooperation in security and conflict resolution). In Germany and the EU, climate change is currently treated as the biggest emergent driver of war and insecurity because failing to adapt to climate stress leads to resource conflict, power grabs, mass migration, and the collapse of cooperation. Since the quality of global security cooperation is currently worsening, the EU is logically pursuing unilateral policies in fields that include climate innovation – for example, its Green Deal and decision to create legally-binding climate targets. Playing with plausible variations of the two factors, we suggest that the EU has things the wrong way round. Investments in European adaptability and high unilateral climate commitments will not help reduce conflict. In order to boost international climate adaptation and avoid climate-induced conflict, the EU should invest in global security cooperation.

Let us start by exploring how our first theme – climate change – plays out across our scenarios. In all three, the EU responds to climate pressures by setting itself high legal targets, yet this leads to negative security outcomes under most circumstances. True, in the **status quo scenario,** the EU is initially protected from security problems thanks to its high level of climate ambition, but not for the expected reasons. Eco-extremists worldwide punish their governments for timidity when it comes to adaptation and point to the EU as an example to aspire to; the EU's high climate ambitions protect it from criticism but unwittingly spur these extremists to acts of violence abroad, and instability eventually spills into Europe. The **worst-case scenario** also shows the perils of too much unilateral climate innovation. The EU's unilateral standard-setting cannot prevent over-adaptation in Asia and the Middle East, causing negative side effects for other world regions as experiments in geo-engineering disrupt the environment. The **best-case scenario** shows that climate innovation works primarily in tandem with strong security cooperation. Governments begin to think of "climate adaptation" less in terms of goal-setting and more in terms of revamping cooperation in sensitive spheres.

This leads us to our theme of multilateral security cooperation. In the **status quo scenario,** multilateralism fatigue and a degradation of global security institutions heighten the escalatory potential for old and new conflicts. The EU's focus on unilateral initiatives initially boosts its resilience. But, over time, its under-investment in multilateral formats leads these global and regional institutions to become sclerotic, allowing violence and insecurity to spread to Europe. In the **worst-case scenario,** multilateral security institutions like the UN are superseded and give way to regional orders under assertive hegemons. This fuels forms of local adaptation, innovation, and deregulation in Africa and the Middle East – but of an extremely risky kind. By contrast, the **best-case scenario** demonstrates how severe environmental crises can result in positive developments as global powers reinvigorate security and conflict resolution institutions to deal with them. This indicates that an EU investment in multilateral security cooperation has greater benefits for absorbing the drivers of conflict than unilateral standard-setting and adaptation.

WHAT TO WATCH OUT FOR – TAKEAWAYS FOR POLICYMAKING TODAY

In the **status quo scenario,** European policymakers would probably predict two things for the EU of 2030. First, that investment in initiatives such as the Green Deal and European green transformation will make it well placed to lead globally on the drivers of conflict such as climate change. And, second, that this unilateral investment will significantly allay any future security problems for Europe itself.

These predictions are partly borne out by this first scenario. Although the EU is initially spared violent conflict, this is less due to the practical effects of its policies and more because of their signaling effects. In this scenario, citizens worldwide react with anger – and then violence – against governments that take approaches deemed too timid to tackle climate issues. The EU is initially spared this new "eco-extremism," which mostly plays out in the cyber realm. And yet, the EU's unilateral progress and its corresponding under-investment in global cooperation is partly to blame for frustrations outside of Europe. Moreover, when it comes to its investment in security cooperation, the EU's failure to renew its usually inventive, grassroots approach to security governance leaves it poorly placed to address these grievances when they do strike the continent.

In the **worst-case scenario,** Brussels' starting point is more positive than in the status quo scenario, in which it was focused heavily on itself. But its good intentions to ensure that its climate policies are more inclusive and cover not only the EU but also its eastern and southern neighborhoods backfire. Its effort at including its neighbors is motivated by geopolitical considerations and forms part of a bid by the EU to promote regional orders as a useful counterfoil to China and the United States, who are polarizing global affairs. The EU fears a hot war between the two powers, possibly triggered by an attempt by China to annex Taiwan. So it is ironic that, in this scenario, there is indeed a Chinese move to seize Taiwan – and, importantly, it occurs precisely because of a growing regionalization of world affairs. In this world order, which is characterized by weak global security cooperation, the United States and China tacitly accept each other's spheres of influence, and China considers, as it does now, Taiwan to fall within its zone. The EU is relieved never to be asked to take sides between the two; yet it receives help from neither the United States nor China as Russia asserts its own influence in Eastern Europe, the Balkans, and the Middle East.

What is the **best-case scenario** – and is it achievable? Our experts foresaw such hoped-for outcomes as states sharing methods of climate adaptation and agreeing on a global approach to other big, shared problems like nuclear proliferation as well as Europeans finally speaking with one voice on such matters in robust global institutions like the UN. This sounds implausible from today's perspective. Furthermore, the steps taking the world in this positive direction in this scenario often involved "lucky coincidences" – such as a radical or cash-poor UK Labour government dropping Britain's nuclear capability, leading to greater streamlining of the European presence in the United Nations Security Council (UNSC) around the E3 (the format of France, UK, and Germany). And yet, the EU is able to capitalize on these unexpected shifts for structural reasons. In this scenario, it had already invested in international security cooperation, be it the E3 with the UK or more established multilateral bodies. This kind of structural preparation left it well placed to turn climate disruptions into opportunities for adaptation.

STATUS QUO SCENARIO: INVESTMENT IN EUROPEAN RULES AND ADAPTIVENESS CANNOT STAVE OFF DISASTER

The United States and China withdraw from global security bodies despite growing threats to the cross-border infrastructure on which their economies depend. In the absence of fora for mediation, border confrontations and inter-ethnic tensions sizzle. US and Chinese refusal to invest in mutual reassurance spills over into multilateral governance more generally; a lack of cooperation on adaptive technologies leaves weak states vulnerable to extreme weather events and resource shortages. Grievances around the timidity of climate policies, the unequal benefits of foreign direct investment, and excessive resource extraction are given form by new political groups. Organized eco-extremists unleash large-scale cyberattacks on infrastructure from Baku to Berlin.

Talk of a New Cold War

An unreformed and sclerotic UNSC epitomizes ten years of under-investment by the United States and its allies. A cash-strapped US has to choose priority issues, and conflict resolution is not one of them. As for China, its economy quickly recovers from the COVID-19 crisis, and it talks of investing in conflict prevention and mediation tools. In reality, China's cash investments in global institutions like the UN are primarily geared toward co-opting their upper management into silence. Beijing's main engagement is in economic standard-setting and investment bodies like the International Organization of Standardization, and it nominates proxies from friendly nations to top positions. China is trying to secure its global web of cross-border infrastructure through such moves rather than peacekeeping. The United States does not counteract this creeping influence because it is keen to reduce its financial burden and is itself increasingly reliant on China's worldwide network of roads, ports, and hubs.

As China's economic and diplomatic clout grows, it uses unilateral displays of military force to prove its capability to secure its worldwide networks, testing the readiness and cohesion of its rivals with provocations off the Spratly Islands, Paracel Islands, and the Scarborough Shoal. A 2022 US-China standoff in the South China Sea ends with both sides backing away. Shortly afterward, China skirmishes with an Indian naval exercise in waters it has claimed for itself and, in what is becoming a pattern, the United States and its allies do just enough to face down China without pushing it to kinetic action. It is a tense environment characterized by frozen conflicts at risk of thawing and latent ethnic tensions. But whenever such tensions look set to explode, China leverages its web of cross-border infrastructure to isolate states one by one. In a typical move, when inter-ethnic tensions lead to confrontation at the India-Pakistan border, China – worried by two nuclear capable powers squaring off – turns off the tap to both, squeezing their reliance on the China-Pakistan Economic Corridor.

The Growth of Grassroots Eco-extremism

The United States and China refuse to set ambitious climate goals, viewing these as a burden that they cannot afford given the geopolitical stakes. Instead, each seeks the allegiance of industrializing nations across Asia and Africa, prioritizing support for their economic development over global climate standards. This takes its toll. Extreme weather events and a shortage of fresh water and arable land lead to tensions in South Asia and the coastal areas of Africa. In the Sahel, resource shortages contribute to tensions between nomads and herders. And on the Horn of Africa, rising sea levels threaten the livelihoods of urban populations, trapping poor populations in precarious situations and leaving them without the means to move. Crucially, there is no global or regional institution or hegemon with the will or capacity to resolve these conflicts. The response to Hindu-Muslim riots in northern and eastern India is typical: Beijing quickly smothers the social unrest by directing its local service providers to cut off power and the internet; yet it does not address the underlying problem of food insecurity brought about by droughts and flooding.

China cannot keep the lid on this pressure cooker forever. Across sub-Saharan Africa, groups that feel trapped between Chinese market interests and the status-quo-driven self-preservation of their national governments conduct physical attacks on Chinese-built infrastructure. A wave of cyberattacks against Beijing follows and is traced back to hacking centers in Egypt, Kenya, and South Africa. Meanwhile, in advanced economies, frustration over the timidity of global climate mitigation measures yields new kinds of civil protest and political extremism. A wave of copycat strikes hits infrastructure – first in China, then in the United States, and finally in the European Union. A globally organized network of "eco-extremist" groups emerges to claim responsibility for this series of attacks. The stricken governments find it impossible to disentangle these radical groups from the governments offering them support. Teheran, Pyongyang, and Moscow, for instance, all feel insecure in a global economy whose infrastructure remains open until one of the bigger powers decides to close it off.

Heavy EU Investment in Climate Adaptation and Mitigation Does Not Suffice

In the early 2020s, the EU not only invests in ambitious unilateral climate adaptation but also signals that it will share its distinctively European technologies and approaches if others sign up to its standards. The idea is that, by exporting its own cooperative approach to climate change, cross-border infrastructure, and resource issues to other governments, it could achieve a more secure international environment. Europe's ambitious policies initially spare it from the global wave of eco-extremist violence, but – far from having a pacific effect abroad – such policies actually fuel violence as frustrated urban groups across Africa and Asia point to the EU and its Green Deal to criticize their own governments. Meanwhile, environmentalists in Europe grow frustrated at the EU's timid position on climate geopolitics. At the Conference of Parties (COP)-34 held in Brussels, the EU fails to take a stand as China freezes Taiwan and its few allies – a scattering of low-lying Pacific islands like Tuvalu – out of the UN climate talks. European eco-terrorists unleash cyberattacks on EU institutions and coal-guzzling EU members with close ties to the United States or China, starting with an attack on Poland and its energy grid.

In the mid-2020s, the United States completes its "pivot to Asia"; seeking to bolster friendly states in the East, it scales down its involvement in NATO's military structures. The US does remain allied to select European states, replicating in Europe the "hub and spokes" set of bilateral alliances it has long had with individual nations in East Asia. Although US power projection continues to offer the EU protection from armed invasion, almost all EU members experience cyber- and hybrid attacks – with Russia the main suspect. Some Europeans respond with "extreme deterrence" in cyber space, but the drawbacks of this aggressive new approach quickly become apparent. Warsaw attributed the cyberattack on its electricity grid to Moscow, but it was claimed by eco-terrorists who had not been active on European soil so far. The incident went on to create splits between those European governments preferring extreme deterrence and those favoring a more cautious approach. In the wake of its very public indecision and lack of cohesion, NATO is downgraded from a collective defense alliance to a coalition of states willing to engage in deterrence against hybrid threats.

Stocktaking: Lessons Learned from 2030

The crumbling of old fora for conflict resolution created a global vacuum, but the EU's failure to pursue its usually innovative approach to geopolitical tension and social governance meant it was poorly placed to fill it. Finding itself surrounded by political timidity regarding climate ambitions and aggressive extractive strategies, the EU looked inward, focusing on domestic standard-setting and climate adaptation in the hope that it could entice other governments to adhere to its norms. In fact, the EU's attempt at global climate leadership only fueled violent and disruptive protests in other world regions and rendered governments there even less responsive. The EU soon found itself marginalized and losing its economic clout. But this negative experience did highlight some potential wins that the EU could already anticipate today. Given the difficulty governments worldwide will face when it comes to agreeing on drivers of conflict such as climate change, it is likely that there will be widespread anti-fossil fuel and pro-democratic movements. Our experts felt that the EU was well-placed to shift paths, away from standard-setting power and toward green power, moving from harnessing markets to social movements.

In this scenario, the EU did indeed develop policies that appealed to new social groups at home and abroad, and this gave it new levers in foreign policy vis-à-vis authoritarian countries. It was one of the few powers with the potential to support "human" and "societal security" that were distinct from more autocratic models of "regime" or "state security." There was significant global demand for just such a security approach in 2030 – or, more accurately, for any approach capable of addressing the root causes of conflict. In our scenario, the UN and NATO were rendered all but irrelevant when it came to conflict resolution, and the EU had an opportunity to become more active. However, this demanded that the EU invest not only in international security cooperation but also in its own defense. Learning from the large-scale cyberattacks it suffered during the 2020 to

2021 COVID-19 pandemic, the EU had an opportunity to develop a robust cyber defense model and to encourage digital security cooperation. But because it failed to invest in security, its leadership role in the field of climate became a liability. Autocratic regimes saw the EU's appeal to social movements as a threat and did their best to undermine it. Eco-terrorists then turned their fire against Europe for its geopolitical timidity.

WORST-CASE SCENARIO: REGIONALIZATION LEADS TO RADICAL UNCOORDINATED EXPERIMENTATION

In 2030, global security institutions give way to regional orders. Regional powers lay claim to their own geographic and technical spheres of influence with the tacit approval of their peers in other world regions. Inevitably, conflict bubbles up – nowhere more so than in East Asia, where China annexes Taiwan, and Japan responds by becoming a nuclear power. As a result, global governance on pressing problems requiring collective action breaks down. This proves devastating in the field of climate mitigation. In the absence of common international goals, uncoordinated technological innovation and over-adaptation prove worse than collective inaction, ultimately exacerbating the potential for climate-related conflict.

Global Governance Collapses and Is Replaced by Regional Hegemons

Beginning in the early 2020s, China and the United States take an increasingly selective approach to multilateral fora, reducing comprehensive global rules-based bodies like the UN to mere shells. As these global bodies become polarized between the two superpowers, local rivalries between regional powers boil up with the belligerents enjoying tacit encouragement from Washington or Beijing. The situation deteriorates into a fourth Gulf War that is sparked as Saudi Arabia and Israel confront Iran. Its effects radiate out into other world regions. In Latin America, for instance, Brazil comes to the fore as its petro-economy benefits from the Gulf crisis, and it takes an assertive stance in its region, inhibiting environmental protection and human rights governance as well as blocking relevant initiatives on the global level. Soon, the world is divided into familiar, old geographic spheres of influence. These form the basis for new "technospheres," which experiment around the local mix of resources and geographic features. Semi-developed regions that benefited from the former, rules-based global order respond to the economic hit with drastic deregulation as they try to attract businesses and powerful allies.

Uncoordinated Technological Innovation Exacerbates Climate Conflicts

All parts of the world agree that climate change is the major challenge they face, but they cannot agree on common measures to respond. Each regional technosphere has its own particular "innovation mix" and, freed from any global regulatory oversight, presses ahead unilaterally with climate adaptation and mitigation. The resulting break-

throughs in climate adaptation are uncoordinated and sometimes excessive. As climate challenges grow, hard-hit regions become more risk tolerant, further deregulating and offering themselves to large outside powers as testing grounds for new climate approaches. An American corporation, emboldened by the US withdrawal from the UN Convention on Biological Diversity, begins geo-engineering by means of high-altitude stratospheric aerosol injection. Ethiopia offers the Horn of Africa as a testing ground. By 2030, the negative side effects of this climate engineering have created "death zones" in the southern Mediterranean, rendering large areas of the region uninhabitable. Conflicts and refugee flows are largely contained to the region itself, but neighboring powers put up barriers and cut off aid and climate cooperation.

Russia Plays Divide and Rule in Europe

Early in the 2020s, the EU begins investing in cooperative regional orders as a buffer against the breakdown of global institutions. It redoubles its investment in its own neighborhood, ensuring that its Eastern European, North African, and Balkan neighbors can fully participate in its post-Covid recovery stimulus and Green Deal. It fears that they will otherwise be drawn into hostile spheres of influence. But this worldwide regionalization turns sour when China claims hegemony over East Asia and annexes Taiwan in a "Velvet Revolution," claiming it as part of its regional sphere of influence, while Japan, lacking reassurance from outside partners, chooses the nuclear path. It turns sourer still when an emboldened Russia asserts its own sphere of influence, justifying it by pointing to the EU's geopolitical assertiveness and brokering a formal division of Ukraine into two separate states. Faced with competition from Russia, the EU not only increases its neighbors' access to European Green Deal funds but also cuts the usual strings attached. The result is a growth of corruption, kleptocracy, and unresponsive strongmen regimes living off large-scale energy infrastructure projects that Moscow can exploit even further.

Stocktaking: Lessons Learned from 2030

The world was prone to new and more escalatory conflicts as climate and security issues intertwined. The most obvious example was the way unregulated geo-engineering in the Mediterranean led to a whole new class of man-made security problems. But there was also the case of Israel and Iran. Before fighting erupted, there was renewed nuclear proliferation. The belligerent states claimed to be harnessing nuclear technologies for the purposes of energy adaptation but were really seeking new means of defense and regional prestige. Moreover, by appealing to climate goals to legitimize such actions, Israel and Iran provided outside powers like the United States and China with an excuse to pass them sensitive technologies. Instead of focusing on global security governance, however, the EU concentrated on shoring up its own regional stability. It chose an assertive geopolitical approach. Like other powers, the EU linked its climate and security policies in new and instrumental ways. It invited its neighbors to sign up to its Green Deal, supposedly to ensure mutual connectivity and joint adaptation, but really to use them as a buffer to a hostile world.

As a long established regional power, the EU might have seized upon these developments to redefine its global role – using the weakness of the United States and China to establish deeper global security governance. However, it was unprepared. Throughout this booklet, it is telling that most scenarios have assumed the rise of China and have projected a global order structured either around the United States and China or around China alone. That suggests that Europeans rarely consider the eventuality that both the US and China might undergo internal crises and lose power. But in this scenario, that is precisely what happened. Both the United States and China suffered domestic pressures as their civil populations voiced discontent with the effects of climate catastrophe and avoidable conflicts. Reduced in status, the US and China needed support to rise to the occasion. A former spoiler state such as China would have had to behave well in areas in which it claims influence – for example, stepping in to defuse an India-Pakistan confrontation. The EU could have seized such opportunities to support global security cooperation. It did not.

BEST-CASE SCENARIO: SEVERE CRISES SPUR COOPERATIVE ACTION FROM OLD AND NEW PLAYERS

A succession of severe natural catastrophes affects different parts of the world simultaneously. Global superpowers are left looking helpless. Authoritarian governments – including Beijing's – whose legitimacy lies in decisively resolving problems that require collective action feel especially powerless. China, like the United States, is forced to accept help from rivals. Democratic and authoritarian countries find ways to engage in cooperation formats based on narrowly defined issues, such as that between the EU and China on battery technology or between the US and China on technological innovation. Mutual reassurance in the security sphere paves the way for institutional breakthroughs such as UN-level tech governance and joint climate adaptation programs.

Security Cooperation Appears All But Extinct

The 2020s begin with a high-profile European initiative for a multilateral rapid reaction force for climate catastrophes, which almost immediately stalls due to rivalry between China and the United States. Global security cooperation decreases sharply, and a gap emerges between traditional multilateral institutions – the UN and Organization for Security and Co-operation in Europe (OSCE) – and rival global governance initiatives such as China's BRI, the Asian Infrastructure Investment Bank, etc. When links are discovered between the US Department of Defense and UN research on geo-engineering, China accuses the United States of "weaponizing the weather." Meanwhile, the United States accuses China of using its lead role in renewable energies to control key rivers and seas worldwide. Their sparring is interrupted by a set of almost simultaneous catastrophes. Severe wildfires burn in Silicon Valley and huge storm waves hit China's rim of nuclear power plants from Hongyanhe down to Fangchenggang with spillover effects reaching as far as the littoral areas of India. Then, a massive oil spill occurs in Siberia, which is blamed on the refusal of the United States to designate biological and cultural protection areas to prohibit the use and transport of heavy fuel oils for shipping in the region.

The Big Powers Bind Together

Chastened by these catastrophes, the United States and China seek to reestablish their global reputations by notching up some successes in global governance. This involves cautiously engaging in mutual reassurance in key geographic domains and sensitive technologies. The establishment of "open technospheres" – global commons mixing shared geographies and technologies – turns out to be key to successful climate adaptation. Seeing advantages for themselves, Beijing and Washington sponsor climate-related technological research in all domains: space (using satellite data to monitor temperatures on earth), air (carbon capture), cyber (5G-based smart energy grids), land (AI-driven reforesting), and sea (floating photovoltaics). As solving global problems becomes a matter of prestige for the two big powers, global power hierarchies are eased. Both the United States and China embrace "multi-stakeholderism" in climate governance – the US in order to bring in non-state actors and China in order to insert state-backed businesses into discussions. A more relaxed China-India relationship reactivates BRICS, a group comprised of Brazil, Russia, India, China, and South Africa, as a more robust tool for shaping global developments.

Stakeholders Rise to the Occasion

In 2030, BRICS demands the reform of the UNSC with the aim of better geographical representation. Measured in narrow terms, this is yet another example of how the EU is losing power to new stakeholders. But Europe is prepared for this. The UK and France trade in their seats among the P5 – the five sovereign states to whom the UN Charter of 1945 grants a permanent seat on the UN Security Council that also include China, Russia, and the United States – for a sole European (UK/EU) seat. Chance political shifts in Europe allow for this trade. The UK elects a radical Labour government in 2024 that drops British nuclear capability on grounds of ideology and cost. And, in 2027, the Green president of France brokers the EU-China agreement on new energy technologies in a constructive exchange that has positive implications for other fields affected by the liberal-authoritarian divide. This global diffusion of power paves the way for a second flagship EU initiative – the establishment of an "International Court for Crimes against the Climate." China, negatively affected by the Siberia disaster, and the United States, still angry at the Chinese nuclear disaster, lend their support to the initiative, even if their own participation remains open.

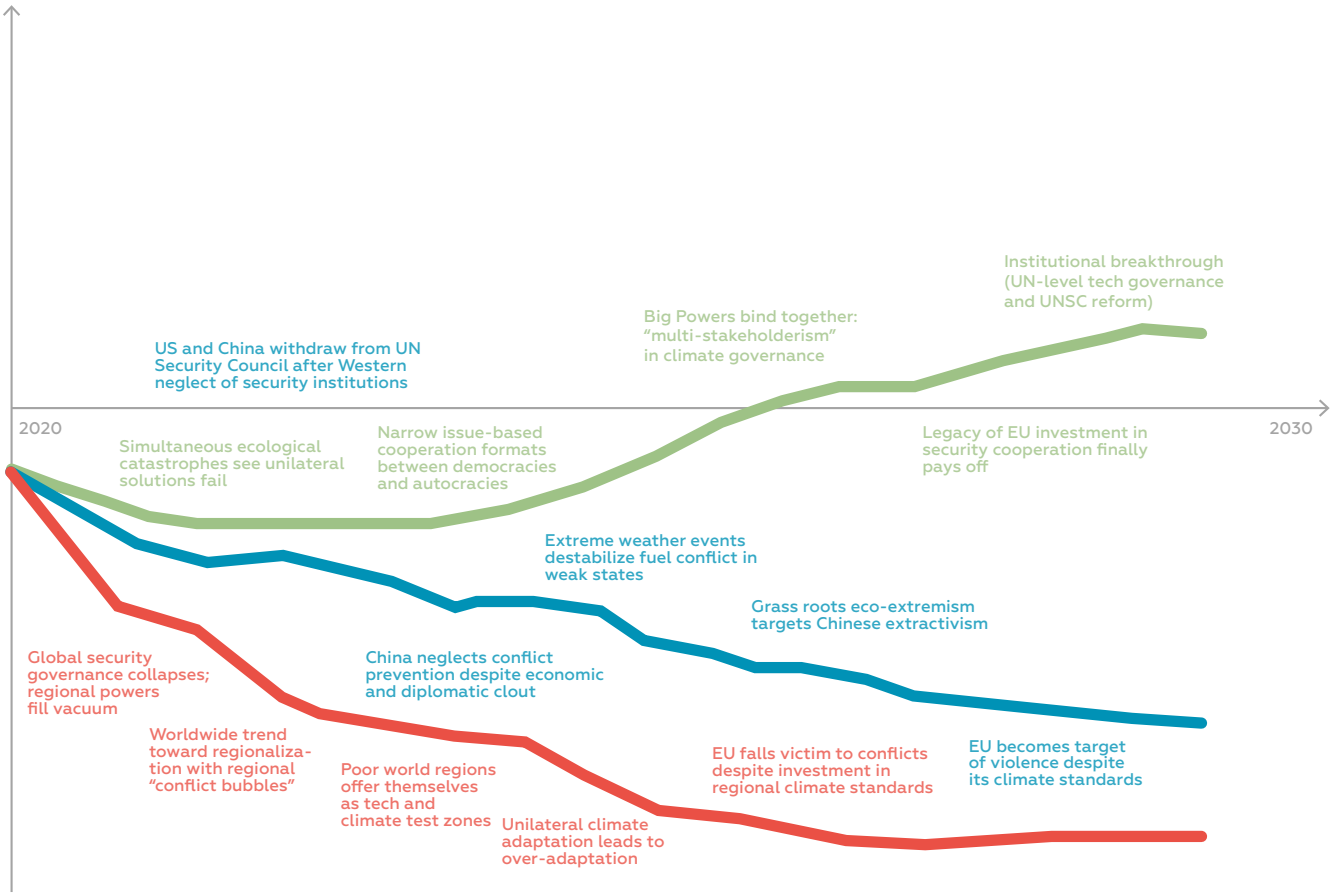
Stocktaking: Lessons Learned from 2030

At first glance, this seems an unlikely scenario, rendered possible only by a series of "lucky" coincidences. In it, multiple natural catastrophes were required to hit both China and the United States to make them seek help and trigger change. European policymakers have always had a habit of kidding themselves that states will rise to the challenge in this way as global collective action problems become greater. But bitter experience suggests that the bigger problems like climate change become, the more states and individuals retreat into

self-interest, free riding, and symbolic sovereignty. Against this backdrop, what – if any – lessons could the EU learn to work toward this best-case scenario today? The obvious one is that investments in security cooperation mattered. Security cooperation preceded successful climate adaptation. The positive outcomes would have been impossible without previous heavy investment in security cooperation that spilled over into different areas. Although the engagement of more actors in global security cooperation meant that the EU lost relative power in terms of its traditional economic competencies, it was able to advance on new issues.

This scenario spawned three further lessons. First: narrow, issue-based cooperation resolved certain problems but meant that underlying dynamics were not always addressed. Cooperation on technical problem-solving supported the EU's highly focused green agenda but sacrificed the goal of promoting democracy and human rights. Despite such a sacrifice, the EU was obliged to maintain technical cooperation with authoritarian regimes. Had relations on larger issues like climate change remained untested, they would have presented opportunities for misunderstandings and conflict. Here, too, security cooperation and mutual reassurance mechanisms would have helped. Second: as ideas and global investments flowed into its neighborhood from outside of the EU, its capacity to act there decreased. But the EU was right not to panic and act in a proprietorial manner there. The EU's standard-setting model was renewed as more actors joined in to shape shared standards. Last: by moving forward on an issue-based cooperative agenda, the EU and United States enhanced their capacity to engage with China. The transatlantic security relationship improved because it moved beyond burden-sharing disputes toward new areas of engagement.

3. OVERVIEW OF THE SECURITY SCENARIOS



Source: Authors' own work

Left Blank on Purpose

Global Migration in 2030: Time To Take Africa Seriously

As part of our research project to assess whether the EU is on the right course for 2030, this chapter looks at **global migration.** By envisioning three scenarios for 2030 – a **status quo, worst-case,** and **best-case** scenario – we aim to ensure the EU is properly aware of the implications of continuing its current trajectory, is prepared for the worst, and understands how to achieve the best. While our group of experts has created scenarios based on multiple dynamics for us to use as a benchmark to monitor the EU's progress over the next decade, we have cherry-picked a single one for this report and pulled out two of its key variables. The status quo, worst-case, and best-case scenarios outlined here each combine these variables in different ways and challenge the usually assumed cause-effect relationship between them, thereby highlighting new policy options that break old path dependencies in Brussels and Berlin.

The EU has come to believe that it is boxed in. Although its set goal is to attract desirable forms of labor to Europe, its efforts to open itself up in order to compete for global migration appear to create pull factors for nearby irregular migrants. Due to its proximity to Africa, the EU seems unable to make itself more attractive to outsiders without attracting a disproportionate wave of unskilled migration and refugees from its southern neighbors. Our three scenarios for 2030 test that proposition by offering different combinations of two variables: **EU policies to compete with the world's other regional labor markets** and **levels of irregular migration to Europe across the Mediterranean.** One of these scenarios suggests that the EU can attract the people it wants without attracting unwanted migration from the South. But this requires the EU to remedy a blind spot – its failure to recognize Africa as an attractive regional labor market in its own right. Rectifying this, our exercise suggests, would help the EU strike the right balance of international competition and cooperation in its migration policies.

The first variable we explore is the EU's policies to compete with other regional labor markets. In the **status quo scenario,** the EU finds itself competing against China through its use of transactional migration partnerships while Beijing leverages elite access to Chinese universities and its labor market to gain favorable trading conditions and access to resources in Africa. In the **worst-case scenario,** regional labor markets become infused with geopolitical and ideological rivalry, and the EU competes by turning its free movement area into a kind of European civilizational zone – defined by a sharp dividing line with Africa. In the **best-case scenario,** developing economies cooperate with neighbors to retain local labor and stave off attempts by outside powers to play divide and rule. The growth of attractive regional labor markets in Africa does not come at the cost of the EU's access to labor. The EU now feels confident to pursue global skills partnerships and circular migration deals, reassured that this will not lead to mass migration from across the Mediterranean.

Our second variable is levels of migration. In the **status quo scenario,** there is a surge in refugee flows. As the EU and China compete with one another to offer bilateral partnerships to African states based on elite visa opportunities, governance problems there sharpen. The EU becomes populist and unattractive to global labor. The **worst-case scenario** sees a huge surge in irregular migration from Africa. North African elites have turned away from the EU as it hardens its southern border, but they open their countries up to immigrants from the south, seeing this as a way to build relations with regional blocs in West and East Africa. These African governments, in turn, simply use Morocco as a bridge to push their workers toward Europe, and Morocco does little to hold them back. In the **best-case scenario,** there is a dip in disorderly migration as the EU stops using its visas, trade, aid, and diplomatic and crisis-management tools in pursuit of transactional migrant deals in North Africa. Instead, it deploys them for their proper purpose – addressing conflicts in Syria, Libya, and the Sahel.

WHAT TO WATCH OUT FOR – TAKEAWAYS FOR POLICYMAKING TODAY

What costs should the EU be aware of if it sticks to the trajectory mapped out in the **status quo scenario?** This first scenario projects an EU whose prime aim is to reduce irregular migration, yet it fails to wean itself off its reliance on an annual influx of informal labor. While this EU of 2030 is undergoing major transformations – economic, geopolitical, climate-related, digital, and demographic – politicians fail to adopt an overarching strategy in which migration plays a role. Consequently, clamping down on migration becomes an end in itself. The EU fails to build up reliable skills partnerships around major issues such as technology and climate; as irregular migration flows become even more unpredictable, it struggles to harness the usual pool of irregular labor for its low-wage sectors, namely healthcare and agriculture. All Eu-

ropeans suffer from the abdication of political responsibility for migration – both those EU citizens trapped in disadvantaged situations and those ambitious young Europeans seeking opportunities in other parts of the world.

Is the EU properly braced for the **worst-case scenario?** In many ways, this is the wrong question: The EU's threat perception is already so heightened that its fears could become self-fulfilling. In this scenario, the EU takes a defensive Eurocentric approach to migration, hemming itself in with deals with authoritarian governments. As a result, the EU misses opportunities. As its neighbors work to keep regional labor flowing in the wake of the COVID-19 pandemic, the EU is slow to see the growth of attractive regional labor markets. It is also slow to note how the gap is closing between the Global South and Global North when it comes to migration priorities, meaning that all states have some interest in regulating emigration, entry, and returns. Moreover, the EU is slow to acknowledge how migration has become overlaid with ideological overtones, making it a key component in the reshuffling of strategic alliances to counterbalance China.

How might the EU work toward the **best-case scenario?** Here, the European Union is able to escape from the vicious cycle in which only defensive border security and transactional deals are options – the toxic side effects of which for good governance, regional cooperation, and, ultimately, migration control lead the EU to seek more of the same. Instead, the EU is finally able to opt for reform both at home, with efforts to deepen the European labor market, and abroad, with a shift in the nature of its border conditionality and the launch of skills and talent partnerships that promote inter-regional mobility. This is possible due to a combination of two factors: first, confidence gained in competing against China for migration and, second, the emergence of vibrant regional labor hubs in the South and in West and East Africa. These developments turn a vicious cycle into a virtuous one. No longer fearing instability beyond – and pressures on – its borders, the EU stops using its various tools as leverage in migration deals with the effect that it actually ends up reducing migration.

STATUS QUO SCENARIO: THE EU TRIES TO OUTCOMPETE CHINA AND DISASTER FOLLOWS

China's comprehensive "Silk Road Migration Plan" offers elites in Africa access to its universities and labor market, as well as lucrative infrastructure projects, in return for strategic resources. The EU thus finds itself competing with a more impressive power both globally and in its near abroad. Its past refusal to advance multilateral cooperation forces it to stick to deal-making with strongmen in Africa, only creating more instability around itself. Disappointed with the buffering deals the EU brings to the table, potential partners are no longer interested when the EU finally proposes more equitable partnerships. The EU finds itself economically weak, divided, and facing a surge in migration.

China Uses Migration Deals in Africa to Gain Standing and Resources

Following a decade of US sanctions, China identifies serious deficits in its capacity for innovation and access to strategic resources. Therefore, it rolls out a set of transactional deals in developing countries designed to plug these gaps. China's deal-making focuses on elites in Latin America, Africa, and Central Asia where it offers government officials and their families access to Chinese universities and businesses – a system dubbed "diplomatic visa liberalization." China's goal is to weaken the ability of regional bodies like the Association of Southeast Asian Nations (ASEAN) to shape policies that retain skilled workers and bargain collectively over resources. It focuses on transnational resources such as fish, water, and hydroelectric power. If a particular government resists its bid for its national resources, China simply waits until these have crossed the border into the territory of a neighbor. Its tactic in each world region is divide and rule – even in its connectivity efforts.

China's talent acquisition programs may use the familiar US-style language of "competing for the brightest and best minds," but they reflect a much deeper geostrategic sensibility. The EU sets itself on a similar path. While it also talks of attracting the brightest and best through its revamped Blue Card program, the EU actually focuses on the mechanisms of multinational corporations (MNCs) and intra-corporate transfers. It makes use of Mode 4 trade rules to allow certain highly-skilled self-employed individuals to establish their businesses in Europe; it gives individual EU regions and cities access to its infrastructure spending; and it encourages these to make mobility agreements with nearby regions – especially those of a similar language group. Its Jean Monnet and Marie Curie Talent Programs cultivate ed-

ucational links abroad, particularly in fields in which it is struggling to access materials like semiconductors and in countries rich in minerals and raw resources. The EU is going head-to-head with China, using the offer of elite gain and access to Europe not only to boost its own innovation profile but also to navigate a world in which access to resources and markets has become trickier.

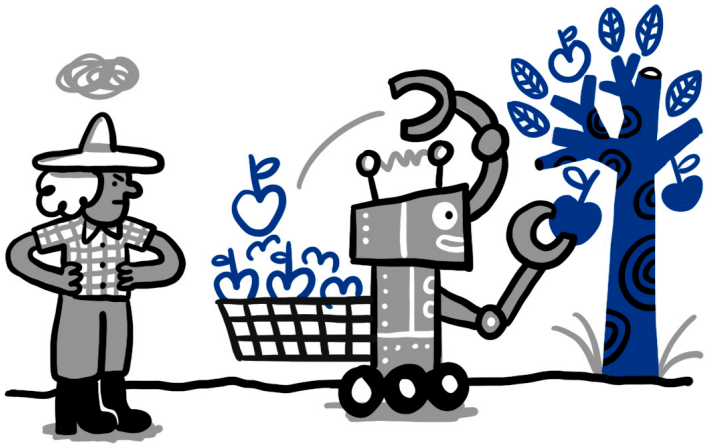
No Leverage, No Interest: Neighbors Increasingly Ignore the EU

If African elites readily engage with China, it is because they are already accustomed to its style of transactional bidding for their human and natural resources. Although the EU has talked up its support for African "collective action" for years, it makes bilateral deals around migration and resources. Political and business elites in East and West Africa welcome the competition provided by China and start a kind of international bidding war for their allegiance. Alongside access for themselves to European or Chinese markets, they demand infrastructure investment from Brussels and Beijing with no political conditions attached. When European governments suggest they lack the financial firepower to keep up, local governments suggest "sanctions forgiveness" – pressing the EU to "cash in" by lifting the targeted personal sanctions it has imposed over the previous decade. The result is a fragmented and top-heavy order in Africa in which governments sell regional public goods – fisheries, water, transport networks, and political ownership of regional bodies and migrants – for individual gain.

Too late, the EU notes that the situation across Africa is deteriorating sharply. Elites across the Sahel, worried about large numbers of disgruntled, underemployed young men, take advantage of their control of transport infrastructure and regional free movement regimes to nudge them abroad. In response, the EU makes a series of buffering deals with local governors in African states that cut deep into the continent's overlapping free movement zones. While Italy makes buffering deals with militias and criminal gangs with the tacit approval of the Netherlands and Germany, Brussels puts a range of sanctioning regimes in place to punish leaders who do not play ball and take back their nationals and those of neighboring states. The trouble is that these leaders lack legitimacy at home and would further strain relations to their neighbors if they took back foreign nationals. In this context, China positions itself as a benevolent power, voicing calls for debt relief from European governments and delivering avian flu vaccines and other healthcare products to stricken regions. The EU, by contrast, is associated with a rapacious form of neo-colonialism.

The EU Strives for Autonomy

In the early 2020s – after a decade of crisis, from the eurozone to the coronavirus – the EU deepens its industrial policy, fiscal stimulus programs, and harmonization of national labor market institutions. This creates the basis for a truly European labor market policy with a proper assessment of Europe's skill needs. The resulting assessment leads it to a two-pronged approach. First, it ramps up the automation of low-skilled jobs in sectors such as agriculture and healthcare, which it began during the COVID-19 pandemic. Second, it competes globally for the brightest and best in fields like technology. But automation is expensive, the advanced technologies are unevenly distributed across the EU, and some of the new systems rely on technologies and materials that are difficult to get. The EU's northern member states and large cities press ahead with this two-pronged approach, rolling out smart city models. But member states in the EU's south – in particular, poor rural regions – struggle as they have no means to sustain their agricultural or tourist sectors.



Smuggling networks come to straddle Europe's external border and the buffers the EU has created across North Africa, feeding the labor needs of Europe's southern members. The Italian government treats these organized crime groups in much the same way as Germany and the Netherlands treat MNCs – as businesses that control the transfer of migrants into the EU and then out again. Scared of losing access to remittances and being stuck with large numbers of unemployed young men, African elites push their nationals northward. These young people cannot avail themselves of their right to work in regional free movement zones like the Economic Community of West African States (ECOWAS)

because of the vicious traffickers and people smugglers who spirit them across the Mediterranean. As the EU defends its borders, it becomes less attractive for global migration. China fully capitalizes on Europe's reputational failure and takes an even more excessive approach to African elites.

Stocktaking: Lessons Learned from 2030

In this scenario for 2030, the EU had the potential to create a much more integrated European labor market than it has today. This is significant because many of the migration problems that the EU currently faces – related to both attracting global labor and absorbing irregular migration flows – arise from its lack of one. The EU is highly unusual in that it has a border-free travel area, the Schengen Area, at the heart of its migration, visa, and border policy. The continued absence of a truly European labor market meant it could attract migrants neither on the basis of an assessment of its combined needs, nor by offering prospective high-skilled migrants access to a cohesive market of 214 million workers. This absence also meant that its member states were affected by migration shocks in highly asymmetric ways as irregular migrants used the EU's border-free travel area to pick and choose between 27 different national labor markets. But in this scenario, despite the changed circumstances, the EU maintained its Schengen-style siege mentality rather than capitalizing on a more integrated labor market.

Then as now, the EU pictured itself at the center of a vast regional (labor) market that stretches into the Caucasus, Levant, Horn of Africa, and Gulf of Guinea. But it developed no means of absorbing these migrants. In this scenario, the EU retained the same approach to migrants – one that is not based on their long-term integration into the European labor force but rather on the short-term mobility made possible by the Schengen Area. (In the words of one of the experts at our scenario workshop, the message to migrants is: "Give us your labor then kindly leave again.") As this approach failed and migrants stayed on, the EU resorted to the same pattern of defensive buffering arrangements as under the current Schengen Area: it made deals with elites, simultaneously reducing their legitimacy and its ability to drive cooperation. Whether through a buffering deal on the territory of Niger or support to Nigeria to strengthen its borders, the EU undermined the efforts by ECOWAS and the African Union (AU) to create integrated free movement zones that might train and retain African labor. Its fears became self-fulfilling as migrants fled oppressive regimes and had nowhere to go but Europe.

WORST CASE SCENARIO: MIGRATION AND THE CLASH OF CIVILIZATIONS

The EU finds itself as just one of a number of regional migration zones with countries in Southeast Asia clubbing together in order to retain labor. This takes on geopolitical and ideological tones as migration becomes a geo-economic tool in the competition among these blocs. The EU struggles to find its place in this new global order and misses the opportunity to reach out to migration regimes in Africa to create multilateral rules. It ends up positioning the European free movement zone as a kind of civilizational space, leading to a hard border to its south – and a surge of irregular immigration.

The EU Concentrates on Competition from the Indo-Pacific

A new regional labor zone forms in the Indo-Pacific that is initially spurred by China. After the COVID-19 pandemic, China reshores production, stockpiles strategic supplies of raw materials, and massively invests in domestic education, but – due to its historical one-child policy – it lacks the population to fill its domestic production jobs. Consequently, it is soaking up migrants from neighboring countries, whom it houses in poor conditions in large suburban migrant centers. In response, a core of five ASEAN members begins cooperating more deeply on intra-regional migration in a bid to retain local labor. Led by Vietnam, whose own youth bulge has been curtailed by large-scale emigration to China, this grouping also consists of Cambodia and Laos, two further states with historically high youth unemployment, as well as Singapore and Thailand, two with an ageing population. In this context, migration soon becomes an ideological tool for these Asian governments – part of the regional effort to counterbalance China and build a shared political affinity. Vietnam rebrands the initiative as a "people's front" against Chinese assertiveness, a framing that attracts the United States. Migration and free movement have become tools in a new Cold War.

The EU Misses an Opportunity for Multilateral Cooperation

Fearing a bipolar global migration system as Chinese and American-led blocs view the ability to attract and retain migration as a matter of geo-economic necessity and prestige, the International Labour Organization (ILO) begins work to link up regional labor markets and border regimes, including ECOWAS and the Intergovernmental Authority on Development (IGAD) in Africa. Four lead states are named – Morocco, Indonesia, Mexico, and Turkey – which form a belt around the world and sit at the crossroads between regions. At talks in Cancun, the four express the hope that this inter-regional cooperation will be the basis for a binding multilateral migra-

tion order. But the EU is nervous of being tied to migration rules, fearing that AU negotiators will oblige it to take in migrants. It also views efforts by the AU and ECOWAS to create African "free movement zones" as being more about lifting borders to allow migrants to move northward to Europe rather than creating well-regulated labor markets. In a world in which migration has become a vector of grand ideologies, the EU views itself increasingly as a "civilizational area." It pursues bilateral buffering deals with Turkey and Morocco to cut off the flow of migrants from the south.

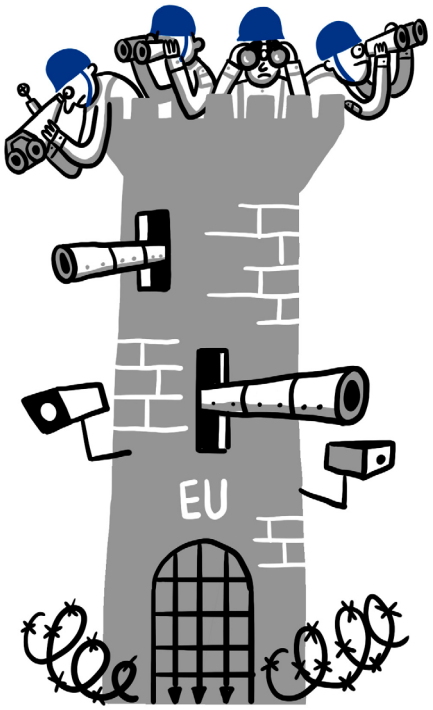
Southern Migration Spikes

Despite its role as a lead state in the multilateral talks, Morocco is primarily interested in currying favor in West Africa. It clearly sees the ideological and geopolitical uses of migration and gleefully capitalizes on the way the EU has rebuffed the ILO's efforts. The Moroccan regime in Rabat turns away from the EU and applies to join the AU's policy to create an African passport area. This, plus its effort to accede to the ECOWAS free movement area, effectively pushes the continent's outer border to within a few kilometers of Spain. Morocco's king is playing geopolitics and liberalizes the country's treatment of migrants, in particular those with an affinity to France, in a bid to literally play kingmaker between West Africa's Francophone and Anglophone states. But he has overreached. Regional powers like Nigeria and Côte d'Ivoire now compete to assert their own pet regional blocs, and they start using their diasporas as geopolitical tools. Social discontent inside Morocco at the favorable treatment of immigrants has already led to violent confrontations; in turn, their countries of origin take offence and stir up discontent with the king. As Morocco crumbles, disorderly migration in the Mediterranean begins to spike.

Stocktaking: Lessons Learned from 2030

This worst-case scenario underlined the fact that there is no inherent link between the EU's policies to compete for global migration and the spike in migration across the Mediterranean. Competition with other regional labor markets played out in this scenario not in the battle to attract migrant labor, but rather to retain local labor and build up regional labor mobility. That meant that the EU did not need to open itself up to global migration to remain competitive – global competition was motivated by ideological and geopolitical, rather than economic, reasons. Indeed, the EU used the competition as grounds to close itself off from migrant labor. That indicated that the EU does not always need to open up to labor to remain competitive. But it also showed that, under entirely different conditions than in the status quo scenario, the EU somehow triggered the same outcome – large-scale migration from Africa. This strongly suggested that there is no given link between the need to compete against other labor markets and the risk of attracting large-scale migration from Africa – rather, large-scale irregular migration resulted from poorly-conceived EU policies.

In terms of opportunities, this scenario serves as a reminder that regional labor markets form in order to retain local labor as much as to attract labor from outside. While this was as true of regional groupings in Africa as it was of the European Union, the EU did not take this eventuality seriously and support the emergence of integrated African labor regimes. Europe's skepticism about Africa's capacity to retain labor was not only expressed in the buffering policies it put in place toward African regions that were based on the assumption that their free-movement regimes exist more de facto than de jure; but it was also expressed in well-meaning policies to reduce the cost of remitting money from the EU to Africa, which incentivized African states to push their nationals toward the EU. It is also a reminder that grand geopolitical and ideological imperatives affect how regions deal with migration. This was the case during the Cold War and in the market ideology of the past two decades. The EU cannot build regional migration regimes in West Africa if it does not understand regional issues, for example, those of prestige between Nigeria and Côte d'Ivoire.



BEST-CASE SCENARIO: MULTIPOLAR DEVELOPMENT BREAKS THE MIGRATION DEADLOCK

In this scenario, the EU successfully boosts its attractiveness as a labor destination, yet it loses its relative attractiveness in its near abroad. On a global level, China has gone into demographic decline and is struggling to attract skilled labor. This leaves the EU well placed to compete. But in other world regions, developing economies have become better at cooperating to retain labor. The EU is slow to realize that it is not the natural destination for Africans, but when it does, irregular migration across the Mediterranean dips.

Competition from China Fizzles Out

China is ageing fast and reverses its policy of sending its nationals abroad as security and infrastructure advisors. Signs of instability at home, where young unmarried men are agitated about "growing old before they grow rich," mean Beijing is focused on domestic affairs. In Africa, the Chinese presence remains little more than an outpost in Djibouti, where Chinese "peacekeepers" are a focal point for locals who, fueled by the tacit support of the Turkish secret services and Qatari moneymen, express their anger at the treatment of Uyghurs. As China withdraws, it triggers upheaval between the Horn's regional rivals. Displacement grows, exacerbated by climate-induced crop failure. The EU, now easily outcompeting "Fortress China" for the attractiveness of its labor market, frets about a wave of irregular migration from the region. It offers a mix of development, humanitarian, diplomatic, and trade initiatives – online learning in refugee camps, a resettlement scheme for refugees that takes their academic qualifications and professional aptitude into account, and a set of "mobility partnerships" for Ethiopians to work in Europe, all of which are tied to obligations on the government to hold back the flow of people.

A New Khartoum Process

Ethiopia insists on taking the issue to IGAD, the eight-country East African trade bloc. There, the Sudanese warn the EU that its new attractiveness will draw people northward, putting a burden on Sudan and threatening to tip the delicate balance of relations with other countries on the route to Europe. They call for a reinvigoration of the "Khartoum Process," the old EU-brokered dialogue between a string of countries on the migration trail to the Mediterranean that accepted money and limited access to European visas in return for acting as buffers. But Ethiopian diplomats push back at this scaremongering: The EU is not, in fact, an attractive market for local workers, so why change that? That string of countries down to Tunisia – Anglophone and Francophone, majority Christian and Muslim – can instead be useful with expertise to overcome the Horn's border tensions and build up the regional labor market regime; and the EU can be helpful in lending IGAD diplomatic weight so that locals gain access to and humanitarian support from the genuinely attractive regional labor markets of ECOWAS and the Gulf Cooperation Council.

Europeans Begin Working Toward a More Multipolar Global Migration Regime

For European negotiators accustomed to thinking of the EU as one of – if not *the* – major global destination for all kinds of migrants, such straight talk from the Ethiopians is a wake-up call. Addis Ababa warns that if the EU returns to its familiar mix of African migration policies – the limited offer of access to the EU labor market coupled with buffering deals – it will create the same old toxic effect, namely new migration dependencies between Africa and the EU as well as the smuggling networks to service them. The message comes just in time: the EU had been preparing to pull development support from southern Africa and plow it back into buffering arrangements in Niger; it had been about to start using its crisis-management missions to post European border experts at the Libyan border; and it was working out how to leverage a new round of regional trade talks for migration conditionality. That is not to say that the EU ceases migration conditionality but, rather than creating buffering deals, it uses its trade and aid to cajole the members of IGAD to cooperate in good faith on regional migration opportunities.

Stocktaking: Lessons Learned from 2030

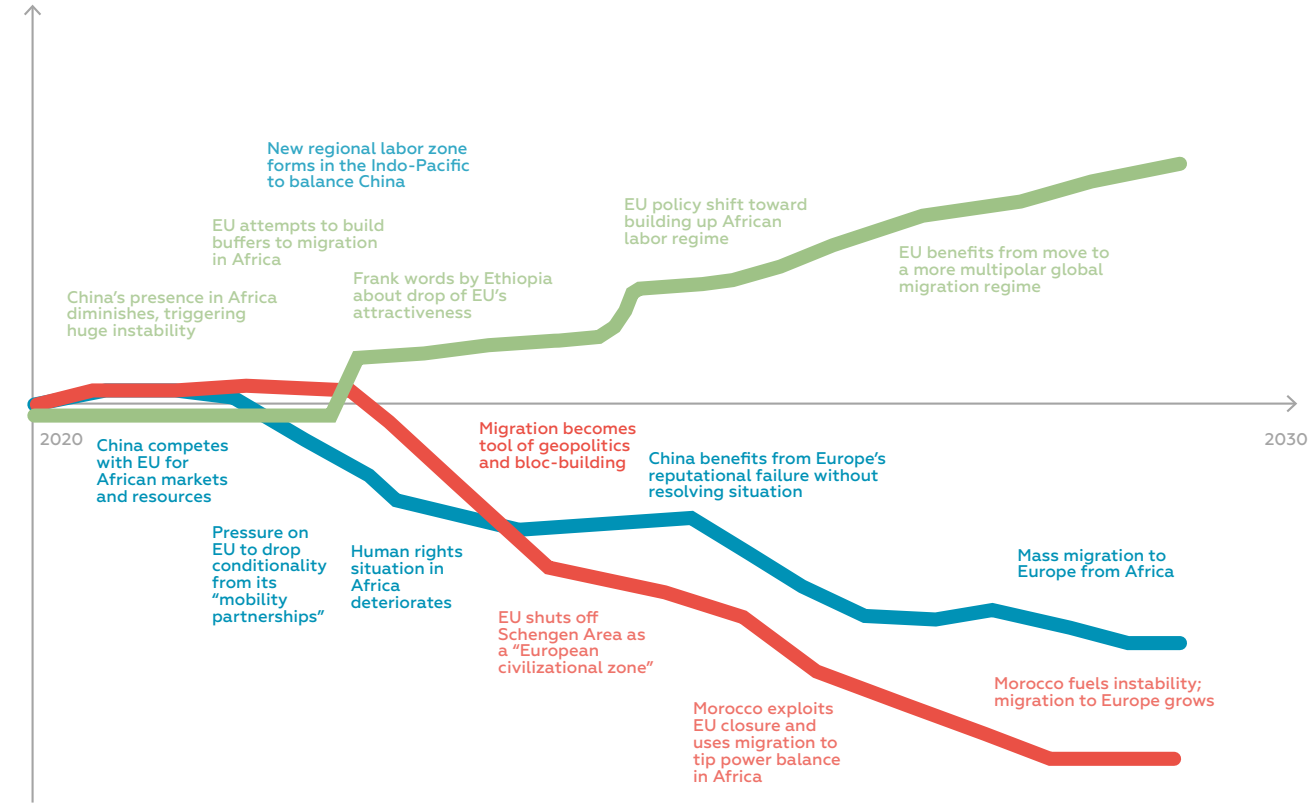
The key breakthrough in this scenario was the realization that regional labor markets, even in Africa, were capable of cohering and retaining labor. On a global level, the old distinction between countries of origin and countries of destination – between the Global South and Global North – were shrinking. In the wake of the global financial crisis, wealth and influence had seeped away from the United States and EU, and these wealthy labor markets lost their absolute attractiveness. Almost all states became countries of immigration, emigration, and transit. Thus, they found more on which to cooperate – rapprochement that played out most intensely at the regional level. In this scenario, the EU was able to help African states to cooperate on border control and immigration as soon as it stopped behaving as if they were all solely countries of emigration. These new African regional labor markets not only retained local workers and

boosted the stock of human capital, but they also attracted outsiders. From inside the EU itself, even in the Netherlands and Germany, young Europeans pressed their governments to secure them opportunities to move abroad to attractive regional labor markets in the old Global South.

As illustrated in the other two scenarios, countries of the "Global Middle" such as Morocco, Turkey, Indonesia, and Mexico were perhaps the first to feel this shift. They had gone from countries of origin to countries of transit to countries of destination; and they had tried to diversify away from the European Union, United States, or wealthy South Asian economies and use migration relations to access emerging local regional economies like ECOWAS or IGAD.

Inside the EU, we can imagine that the EU's eastern and southeastern member states were key to the EU's own reassessment of the situation. Their recent experience of migration has been very different than that of the "old" member states – their nationals moved abroad in large numbers in the mid-2000s and often landed in poorly recognized roles. They experienced the divisiveness of mobility and of large populations that chose not to be mobile, and they were left with national problems. They also took the lead in the EU when it came to diaspora policy, finding ways to open up good emigration opportunities for their nationals and seeing that "circular migration" and "mobility partnerships" could apply to EU citizens going to attractive third countries just as much as to immigrants coming into the EU.

4. OVERVIEW OF THE MIGRATION SCENARIOS



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