



ART

Analysis and Research Team

Forward Look Trend analysis

21 December 2021

Introduction

The European Council and the Council will face a range of challenges, both existing and new, in the coming year. Some of the issues that leaders and ministers will have to deal with – such as the continuing management of the consequences of the pandemic or the EU's role within the wider geopolitical environment – are known and ongoing. There will be new issues, some of which are planned or at least foreseeable. But unexpected challenges such as natural disasters may also need to be addressed, and these can disrupt normal business. Internally, a number of national elections will take place during the year. These can also affect the dynamics of the two institutions

There is also a wide range of future challenges that can be categorised as 'known unknowns', such as the societal and security implications of technological breakthroughs. These are challenges that are in the making. They are evident to those who are following them closely, but they do not attract sufficient attention at the political level.

The European Council has always combined a crisis/policy management function with its role as agenda setter for the EU. The start of a new year is a good moment to take a step back and reflect on the broader context at both the European and global level. It is a time to look ahead at what we can expect in the coming year and how to be better prepared. This Forward Look offers a basis for reflection on the main issues facing the European Council and the Council. It sketches out the likely influences of the world of tomorrow in order to help inform today's policy planning process.

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'Strategic foresight' has become something of a buzzword in the European institutions. It is an important toolkit for anticipating possible futures that is being used increasingly frequently. The Analysis and Research Team has drawn on the practice of foresight to explore and analyse the key trends that are likely to shape the world in which the Council and the European Council will operate in the years to come. The outcome is the result of a collaborative exercise, involving colleagues from across the General Secretariat of the Council as well as trainees.

The seven trends that emerged from this process: global fragmentation, polarisation, evolving economic models, digitalisation, climate and environmental challenges, demographic imbalances, and changing politics, are likely to be the main policy drivers for the EU over the next decade. These trends, and the way they interact with each other, will directly affect most aspects of our daily lives, and therefore influence EU decision-making. They will create challenges, but should also generate momentum to act, and where possible, to do so proactively.

In order to encourage broader reflection, each trend begins with an analysis of the long-term outlook, corresponding to the likely situation in about ten years' time. The medium-term outlook looks five years ahead, while the short-term outlook covers the coming year. At the end of each trend, some thoughts are offered on ways in which the trend could affect the Council and the

European Council. This is intended to help support the policy planning process. The conclusion wraps up all these reflections to offer an overall assessment of the trends and how they interact with each other.

As in any year, 2022 will see an extensive programme of national and international meetings, as well as other events. A significant number of elections are foreseen, and there may well be others that are not known for the moment. The impact of the outcome of these elections will need to be factored into the work of the Council and the European Council. For ease of reference, a non-exhaustive calendar of events for 2022 has been included as an Annex.

Any forward-looking exercise is always to some extent selective, which brings with it the risks associated with blind spots and cognitive biases. This Forward Look is not intended to be a forecast or prediction for the coming year. Events will - as always - unfold in ways that we cannot foresee, but they are likely to combine elements from the trends covered in this paper. This paper should therefore be seen as a tool to help place the work of the (European) Council in its wider context. It is intended to assist in understanding how specific policies and objectives might benefit from opportunities, or address challenges and risks. Of course the European Union is not a passive observer. It has the opportunity, through better understanding what lies ahead, to shape the course of developments in a direction which best suits its own interests.

KEY TREND 1: GLOBAL FRAGMENTATION

The rise of China, and the concomitant decline of 'Pax Americana', are pushing the world in an increasingly multipolar direction. As American leadership wanes, and regional agreements proliferate, the post-war multilateral order faces ever more challenges. These trends paint a picture of a more fragmented, complex and volatile world. But there is a high degree of uncertainty as to which future scenarios will indeed play out.

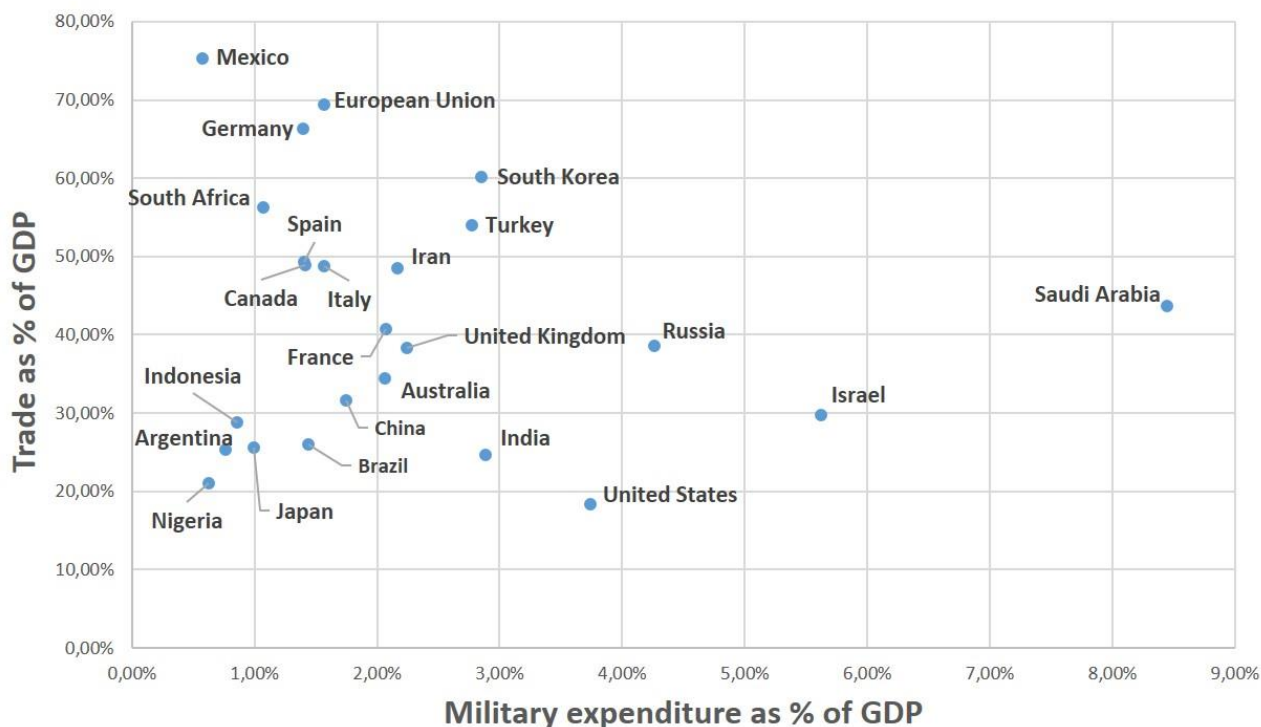
Long term: US-China confrontation and the future of transatlantic relations

China's economy will continue to catch up with the US during the course of the 2020s, although its rate of growth is expected to slow during the following decade¹. In the long-term, a US-China cold war could be the axis of a renewed great power competition, splitting the world into separate spheres of political, economic and even technological influence². Increasingly, this competition may express itself in the form of hybrid non-military hostile actions involving the weaponisation of all the elements of global connectivity³, such as trade, finance, migration, cyber technology, even international law⁴. As these actions are characterised by lower risk and lower commitment of resources – compared to traditional military measures – their use is likely to become more and more frequent.

At the same time, as China's power peaks and starts declining, Beijing could be tempted to act more aggressively (e.g. over Taiwan) and take greater geopolitical risks⁵. This raises questions as to how other major powers would respond to such an event – including the EU, which would struggle to maintain any form of equidistance between Washington and Beijing. A similar logic could apply in the case of Russia's decline, adding to an already long list of regional military hot spots.

In a US-China cold war scenario, Europe would be further relegated to a secondary position in US geostrategic calculations, as Washington focuses on East Asia and on nurturing its network of alliances in the Indo-Pacific. Transatlantic relations could see either a rapprochement, driven by common security concerns and a renewed economic and technological partnership, or further distancing as a result of increased economic competition, regulatory differences, and divergent geopolitical interests. The outcome of the 2024 US presidential elections and Donald Trump's possible return to the White House would most likely play a significant role in determining the direction of transatlantic relations. In either case, the EU's global relevance in the next decade will depend largely on the development of sufficient autonomous defence capabilities and a greater willingness to use them to promote and defend its interests.

Figure 1: Merchandise trade and military expenditure as a share of GDP



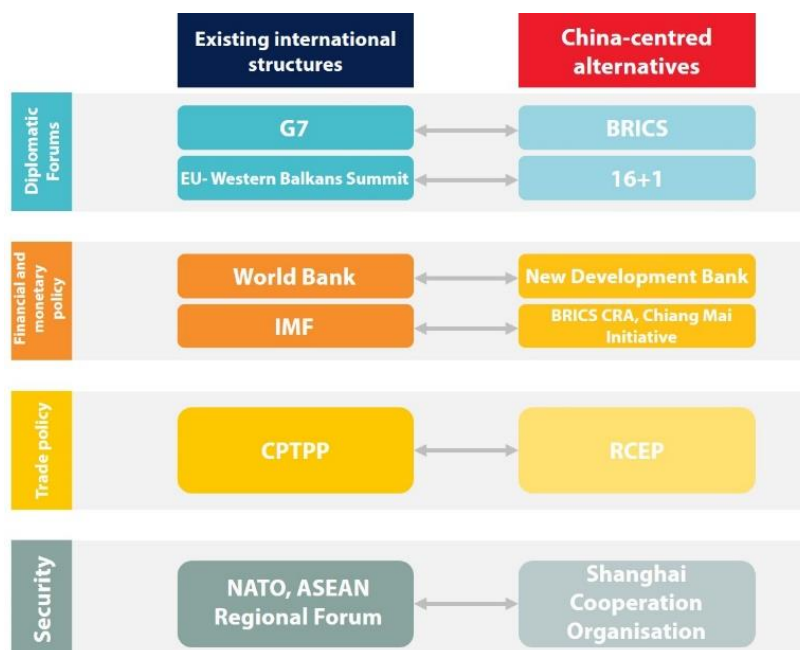
Source: GSC-ART, based on data by World Bank, WTO, SIPRI

Medium term: global economic/institutional fragmentation?

US-China relations are expected to continue to deteriorate, creating rifts in international trade, finance, investment and technology. On the one hand, the Biden administration will try to muster an ‘alliance of democracies’ to put pressure on Beijing using sanctions and restrictions, including against third countries and companies if necessary. On the other hand, China will continue to use commercial retaliation as a foreign policy tool against its opponents, albeit with mixed results⁶. These divergent pressures may eventually force other countries to ‘choose sides’, and this will be particularly significant as China continues to promote its own ‘parallel’

institutions as alternatives to the Western order, and to pursue key posts within the UN system. A less integrated global economy may slow down the pace of recovery, which may in turn reinforce calls for greater autonomy and resilience measures. Global value chains could become regionalised and localised, and the vulnerability of critical supply chains could push major powers to become increasingly self-reliant. 2024 will be a particularly significant year, as several key elections (in the US, Russia, India and EU) may provide a clearer indication of the attitudes of leaders and electorates in major powers, and consequently of the long-term direction of global politics. Turkish elections in 2023 may also be of significant regional impact.

Figure 2: Overview on China-centred alternative structures to Western institutions



Source: GSC-ART, based on MERICS⁷

Outlook for 2022: a divided EU in search of strategic autonomy

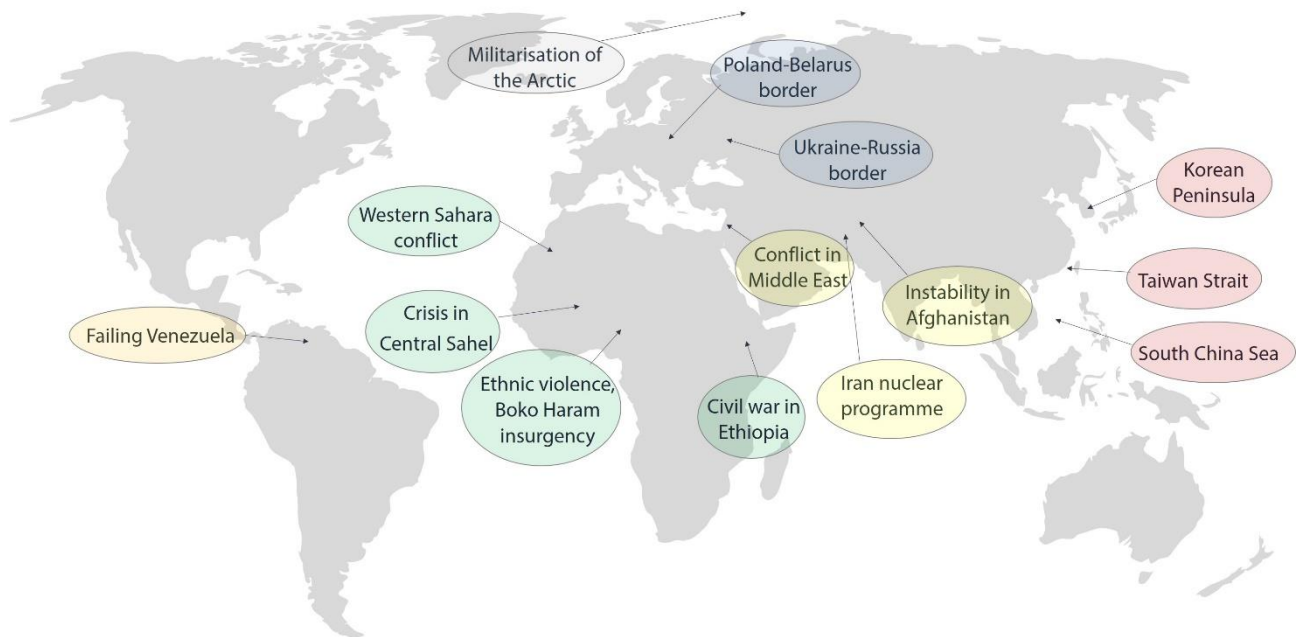
The 'global fragmentation' trend gives greater urgency to European debates on defence and strategic autonomy, and 2022 has already been dubbed 'the year of European defence'⁸. At the same time, as a result of growing US-China confrontation, Washington may increasingly look towards Europe to find like-minded allies. This risks the EU being drawn into a global battles of narratives which could have domestic repercussions and highlight internal contradictions, as evidenced by the selective approach of the US in choosing participants for

its Summit for Democracy. The acceleration towards a multipolar world could have a disrupting effect on European unity by accentuating differences among Member States. Maintaining a common front on international issues will increasingly become challenging. Brazilian elections in October, and Xi Jinping's push to re-affirm his leadership at the 20th National Congress of the Chinese Communist Party, could prove to be a source of instability during preceding months and in their immediate aftermath. At the same time the lingering effects of the Covid-19 pandemic will continue to drive an ever deeper wedge between the world's richest and poorest countries.

Figure 3: Overview of current and potential geopolitical hotspots

Geopolitical Hotspots

Areas of major instability and possible triggers of future conflict



Source: GSC-ART

Impact on the European Council and the Council of the European Union

- In preparation for the announced EU-China summit, the European Council may have to discuss topics such as the Comprehensive Agreement on Investment, human rights and sanctions. These discussions could be an opportunity for EU leaders to re-define the strategic lines of Europe's position towards China (and therefore also towards the US and the world at large), moving beyond formulaic definitions.
- The US shift towards Asia carries both risks and opportunities for Europe. If the US is unwilling to be drawn into future crises in Europe's neighbourhood, the EU may find itself with increased responsibilities which will test its credibility as a geopolitical actor. On the other hand this may also present opportunities for further defence cooperation and integration with Washington's support.
- The EU's ambitions of strategic autonomy may face a crucial test already in early 2022 in a possible Russia-Ukraine crisis.
- While emerging bipolar dynamics cannot be overstated, global fragmentation involves also a greater role for relatively smaller regional players. If the EU is able to maintain a position of relative non-alignment in this bipolar and fragmented context, it may be able to extend its diplomatic influence and leverage its experience in brokering compromise.

KEY TREND 2: POLARISATION

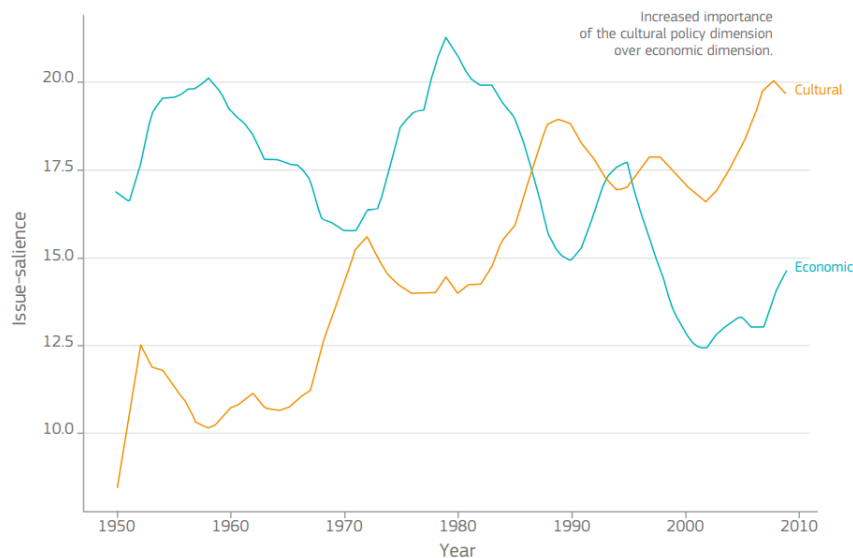
Various kinds of polarisation – whether economic, geographical, cultural or political – affect societies around the world⁹. The wide range of disruptive forces that influence all aspects of human life are likely to lead to an increase in polarisation over the next decade. As a result, leaders will be faced with the challenge of managing and addressing societal fragmentation.

Long term: from economic to cultural dividing lines

Culture rather than economic status is increasingly defining political identity. This in turn means that polarisation is also as much about culture as it is about economics¹⁰. Since cultural

identity is largely non-negotiable, compromise becomes more difficult, which hampers the ability of political institutions to deliver solutions¹¹. Populist and far-right parties in some Member States are expected to continue to try to win support in disadvantaged areas and amongst young people¹², while more generalised protest movements ('anti-movements') look to foment popular discontent by conflating a range of divisive issues. Disinformation and extremist views are set to continue to try to seek to influence through social media, further strengthening calls for restrictions on on-line content. This can create further cultural tensions between those who want to limit the freedom of expression and advocates for civil liberties¹³.

Figure 4: Cultural and economic issue salience in political manifestos in 21 western democracies

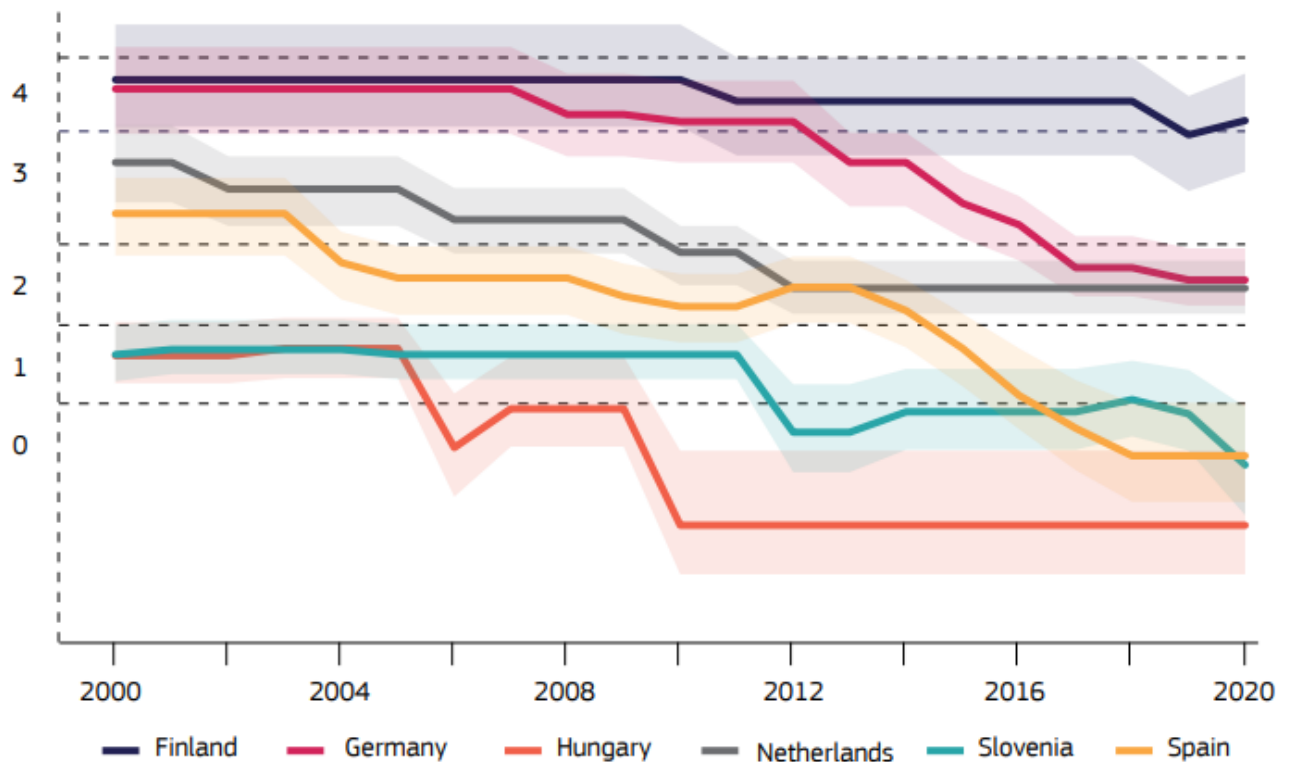


Source: Scharfbillig et al. based on Hall¹⁴

Polarisation on-line can lead to harmful behaviour. Disillusionment with the traditional political system can encourage individuals to resort to violence. This can range from lone-wolf attacks to more coordinated attacks on high profile figures or institutions. Today's highly connected world means that small cells can operate semi-independently, but be supported and encouraged by like-minded peers online¹⁵ In

addition, Jihadist groups, which are increasingly operating in Africa and Central Asia¹⁶ may choose to exploit tensions over the role of religion¹⁷ as well as anti-immigrant attitudes in Western countries and focus their attention again on Europe. In general, if polarisation is not addressed, it risks undermining democratic norms and institutions.¹⁸

Figure 5: Polarisation of selected societies in Europe



Note: 0 indicates serious polarisation on almost all key political issues and 4 indicates no polarisation.

Source: Cagnin et al., based on V-Dem¹⁹

Medium term: twin transitions could fuel polarisation

The impact on society of major changes resulting from the green and digital transitions is likely to become visible in the medium term. If not properly managed, the transitions could lead to further inequality, which could in turn act as a catalyst for a rise in political polarisation.

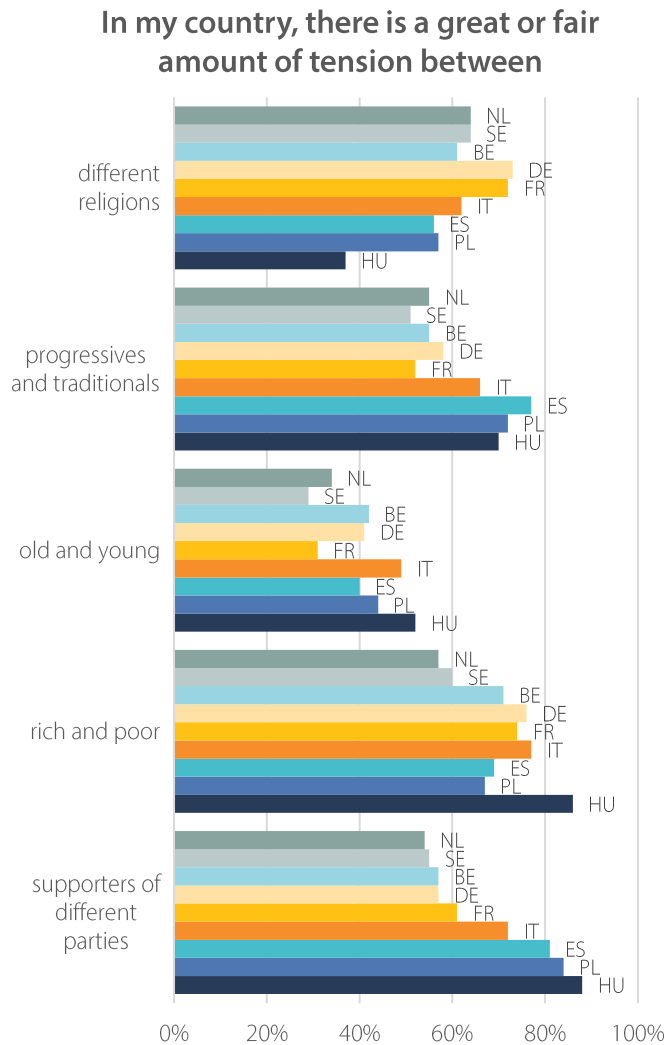
Demographic trends could also widen the existing divide between urban and rural areas²⁰ as well as between generations. The debate about migration and refugees is becoming increasingly polarised in many European countries in recent decades²¹, further exacerbating the risk of deeper divisions in society.

As the COVID-19 pandemic has shown, populist leaders are able to use the multiplier effect of social and other digital media²² to exploit disruptive events as a way of fomenting

polarisation. Extremist groups, particularly on the far right, are known to exploit disruption for online radicalisation²³. But populist leaders are also increasingly choosing to stoke tensions for short-term political gains²⁴. This trend could undermine the success of the comprehensive and longer-term strategies that are needed to address the impacts of climate change and the digital transition.

Securing widespread support for these strategies depends on society having a shared reality. Yet the perception of objective truth, encouraged by the echo chamber effects of social media²⁵, is becoming increasingly contingent on individual belief systems²⁶. That may make it difficult to win full public acceptance for the urgency of tackling issues such as climate change, and even more difficult to win support for mitigating measures which may well come at a high cost.

Figure 6: Degree of societal tension in selected EU Member States



Source: GSC-ART based on Ipsos MORI²⁷

Outlook for 2022: how do societies emerge from the pandemic?

The COVID-19 pandemic required the introduction of extraordinary measures such as long-term confinement, and led to an increased reliance on digital connectivity. It has been a period of social upheaval, the effects of which are likely to continue to be felt in a post-COVID world²⁸. Although many accepted the need for constraints on their freedom, others sought to challenge the system, including through their opposition to vaccination (the antivax movement). COVID-19 amplified the existing polarisation of opinion, but was also exploited by some for their own ends. The same phenomena may persist in 2022, particularly if rising energy

and food prices continue to have a significant impact. This is likely to coincide with growing realisation of the real costs of the green transition. If anti-movements coalesce into an organised collective opposition to the established political class, they could develop into a powerful political platform. Important elections taking place in 2022 in Europe, will provide some indication of the extent to which European societies are polarised. At the same time, solidarity between essential workers and those impacted by increasing living costs could impact on labour relations and lead to workers feeling empowered to demand better working conditions²⁹.

Impact on the European Council and the Council of the European Union

- As the end of the COVID-19 pandemic has not yet been reached, the ongoing trends of societal polarisation amplified by the pandemic may continue to affect views around the table at the European Council. This could lead to watered-down solutions or difficulties when striking compromises as leaders fear opposition at home.
- In increasingly polarised societies, communication by national leaders about compromises reached at the Council or European Council becomes even more challenging. Communicating a coherent EU message will be as important as it is difficult.
- Mixed messaging and heated public debates between leaders create an image of polarisation within the EU. Member states openly disavowing EU values exacerbate the appearance of division and damage the credibility of the EU as an advocate for common values. Failure to address these challenges could lead to a serious loss of credibility in the eyes of citizens and the world.
- Important elections taking place in multiple member states will affect the willingness of leaders to compromise. Leaders who came into power on polarising election campaigns will affect the decision-making capacity and normative power of the Council and the European Council.

KEY TREND 3: EVOLVING ECONOMIC MODELS

The EU's share of global GDP is declining, as that of Asia is growing. Europe faces challenges from very different economic models, most obviously that of China, which has proved to be remarkably successful. A combination of domestic pressure arising from environmental and social concerns and the increasing ineffectiveness of multilateral organisations raises the question of whether the Europe's current economic model will remain sustainable in its current form.

Long term: different paces of growth, both globally and domestically, increase inequalities

The world's economic centre of gravity will continue to shift to the Asia-Pacific region (this is currently happening at the speed of about 100 km a year)³⁰. The EU's declining share of global

GDP may well lead to a loss of geopolitical influence. Yet the EU is set to remain one of the key three global players, alongside the US and China, both of which will face their own economic challenges in the longer-term. Environmental and social pressure might encourage a reassessment in Europe as to whether the pursuit of economic growth, measured solely in terms of GDP, remains an appropriate way of assessing the quality of life. This could encourage support for policies such as a Universal Basic Income or for new business models with a different approach to profit sharing. However, other trends such as political polarisation could also make economic decision-making more difficult. Digital currencies - both private and public - are expected to play a dominant role in financial transactions and could be a significant disruptive force.

Figure 7: Geographic shifts of the earth's economic centre of gravity over time



Source: The Economist³¹

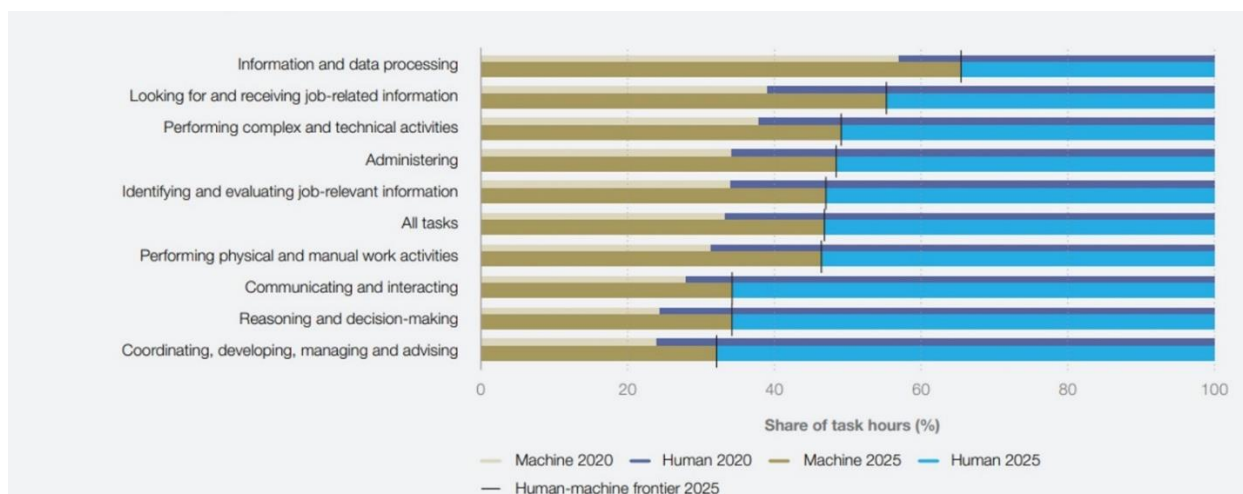
Within national economies, technological innovation, climate change, urbanisation and international migration are expected to fuel inequality³². Low income growth and continued economic uncertainty could undermine the security of the middle classes in developed countries, while a newer prosperous middle class in Asia is set to expand further.³³ Europe's share in the global middle class is forecast to shrink from 20% in 2020 to 14% in 2030³⁴. The digitalisation of the economy is expected to have a profound impact on the labour force, with significant expenditure needed to develop new skills. Unless addressed effectively, automation could lead to greater job insecurity and feed inequality, with a possible political backlash³⁵. Even though labour shortages caused by demographic changes might strengthen the position of European workers, the processes of de-industrialisation and de-unionisation are likely to contribute to the ongoing power shift from labour to capital³⁶. Technological innovations, such as instant payments, will facilitate trade, and the growth of the global middle class will stimulate consumer demand. But, global fragmentation will have economic consequences, with an increase in the geopoliticisation of trade, regional fragmentation, a decrease in the effectiveness of multilateral organisations, and the wider use of trade as a foreign policy tool.³⁷ The competition for critical raw materials will accentuate economic fragmentation.

Medium term: global fragmentation has economic consequences, while automation transforms the workplace

Slow vaccination rollout globally will cost the global economy USD 2.3 trillion in 2022-2025, of which two-thirds will be borne by developing economies³⁸. Vaccine inequality will also have a long-term productivity impact, leading to slower growth in developing countries throughout the next decade³⁹. While public spending is essential both for the economic recovery and the green and digital transitions, the difference in countries' fiscal stimulus capacities⁴⁰ threatens to exacerbate global inequality, and borrowing costs might become significantly higher, especially for emerging market and developing economies⁴¹. This could compound the already precarious position of, for example, sub-Saharan African countries.

Within countries, the disproportionate impact of pandemic-linked job destruction on low-paid and low-skilled jobs, women and young people will lead to greater inequality in the next few years⁴². At the same time, the effects of automation will start to be felt in the medium term, with significant employment displacement by 2025, but the possible creation of around 97 million new jobs⁴³.

Figure 8: Share of tasks performed by humans and machines, 2020 and 2025 (expected) by share of companies surveyed



Source: World Economic Forum⁴⁴

The EU's pandemic recovery package is likely to be judged not just in terms of economic growth, but also by the extent to which it manages to mitigate inequality. The impact of the international agreement on fair and digital taxation will be closely watched for its ability to deliver what it promised. At the same time, in the medium term the costs of the green transition will start to bite. Interest rate rises in Europe could affect pensions and housing markets, leading to further social pressure.

Innovation will transform many parts of the economy such as securities exchange operations and supply chains, which will benefit from the gains in efficiency, transparency and interoperability introduced by block chain technology. The growing importance of digital currencies will make it more difficult for central banks to retain control of monetary sovereignty and autonomy over the financial flows within their currency area⁴⁵. They will also challenge the traditional business model of banks.

The expected push to re-localise value chains will decrease some of the EU's critical dependencies on third countries, but also create difficult trade-offs, for example between economic and environmental interests (lithium mining is a case in point), and could reduce economic growth. At the same time, US-China decoupling – accelerated by the pandemic – is expected to continue, increasing risks for business and investors⁴⁶ and presenting others, including the EU, with fundamental choices as to where to position themselves.

Outlook for 2022: supply chain disruptions will threaten economic recovery

The global pace of recovery from COVID will vary considerably. The impact of the pandemic has been uneven and so are the recovery risks⁴⁷. The per capita GDP of many developing and

emerging economies is expected to remain below pre-COVID 19 levels for an extended period⁴⁸. The EU economy is set to expand by 4.3% in 2022⁴⁹, but energy price rises will have some impact on growth. The fiscal rules will remain suspended in 2022, but if inflation persists, central banks will have to face the issue of whether or not to withdraw stimuli faster⁵⁰, with the risk that sudden movements could significantly affect stock and housing markets. These different elements will shape the context for the debate on the future of public debt. Across the world, workers (particularly in Latin America and the Caribbean, Southern Europe and Southern Asia) continue to suffer from losses in working hours caused by the pandemic, and the fiscal space and capacity to respond with income support measures vary significantly between countries⁵¹. Africa's debt burden is a growing problem that could have significant political and economic consequences, not least because temporary debt relief measures expire and the G20 Common Framework is yet to deliver at a time when economic growth rates in the developed world and monetary policy normalisation will increase the cost of debt service⁵².

In developed countries, the gig economy has expanded, raising politically sensitive questions about working conditions and social protection⁵³. Bottlenecks and supply shortages are expected to continue into 2022 and could hamper economic recovery. Many companies face disruption from emerging technologies (such as ransomware attacks), geopolitical tensions (trade barriers, secondary sanctions), trade barriers, political uncertainties, social injustice and the implications of climate change. Most expect further disruption over the next five years⁵⁴. For political reasons, supply chain re-localisation is set to continue as part of a growing trend towards protectionism.

Impact on the European Council and the Council of the European Union

- Economic and social inequalities are likely to define the decade to come. Addressing them is expected to be key in the shaping and delivery of both existing and new policies (recovery fund, taxation, rules for the gig economy etc), which will in turn be important in influencing the public's view on the EU's effectiveness in overcoming the economic impact of COVID-19 and in adjusting to a new economic reality.
- The debate on the future fiscal rules will take place against a background of economic growth but in a context of continuing supply chain issues. At the same time the scale of the costs of the green transition are likely to start to become more evident.
- Long-term global shifts, including the growing importance of the Asia-Pacific region, the US focus on China and changes in trade patterns are expected to require the EU to engage in regular assessment of its geopolitical role, including its approach to trade policy.
- The rapidly changing currency landscape is likely to prompt some serious reflection about the EU's approach to public and private digital currencies.
- An impending debt crisis in Africa could generate security risks, but also provide an opportunity for deepening existing partnerships, possibly addressing topical issues such as access to raw materials.

KEY TREND 4: DIGITALISATION

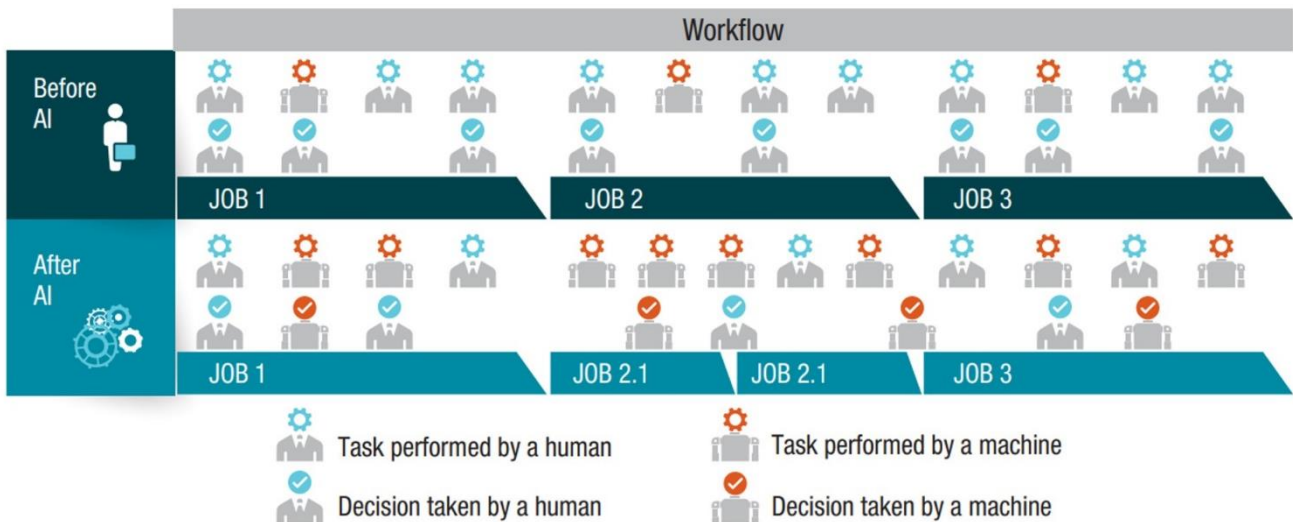
The digitalisation of societies, governments and businesses is bringing massive and rapid transformation. This offers the prospect of significant benefits, but also raises serious concerns about the wider impact on individuals, society and politics. Moreover, digitalisation will play an increasing role in the rivalry between the larger global powers across a range of areas (industry, diplomacy, military, cyberspace...), with the risk of potential conflicts.

Long term: more digitalisation will shape a different world

In the longer term, digitalisation is likely to have a number of positive effects, delivering appreciable benefits to citizens, helping tackle major global challenges such as climate change, and contributing to an improvement in the quality of health care, and of public services generally. The convergence of technologies that allow more decentralisation and lead to the merger of virtual and reality, such as the extensive employment of the Internet of Things, the deep transformative

impact of quantum computing, a larger use of outer space, and the fast progress in biotech and robotics, could bring about profound changes in human culture. Human beings and machines are likely to interact in many aspects of daily life, and the development of metaverses could blur the lines between the digital and real world. A more digitalised society is expected to give greater empowerment to the individual, non-state actors and tech giants. Faced with a multiplication of actors, states will need to re-think their role and their means to deliver. Networks, ecosystems and private entities could become more influential than states in areas that have traditionally been the prerogative of the state such as currencies and space exploration. Social cohesion as well as the sense of national belonging could erode. The democratisation of new technologies could place individuals at the forefront of (cyber) conflicts, both as a target and a line of defence. At the same time, digitalisation may create new opportunities, for example for citizens' political engagement or in the field of education.

Figure 9: Jobs, tasks, decisions and automation by AI



Source: United Nations Conference on Trade and Development⁵⁵

Even more than today, digital technology will be a function of geopolitical power, with the geopolitical race to develop and govern new technologies expected to continue. If Europe shows that it is able to take full advantage of the potential of the digital transition, it could secure a

key role for itself in setting global standards and tackling threats to society such as disinformation and the malign use of AI. But in the absence of independent policies to harness the benefits of digitalisation and address some of its negative impacts, Europe is likely to face a number of key

challenges. Domestically, these could include managing the risk that digitalisation will drive divisions in society, and addressing the massive energy consumption of developments such as blockchain. Globally, Europe could find itself at the mercy of powerful tech giants which challenge the principle of public accountability, as well as of third countries who set the rules, provide the resources and develop the technologies and products that define the lives of Europeans.

Medium term: tangible benefits for people but with questions over the ability of the EU to regulate

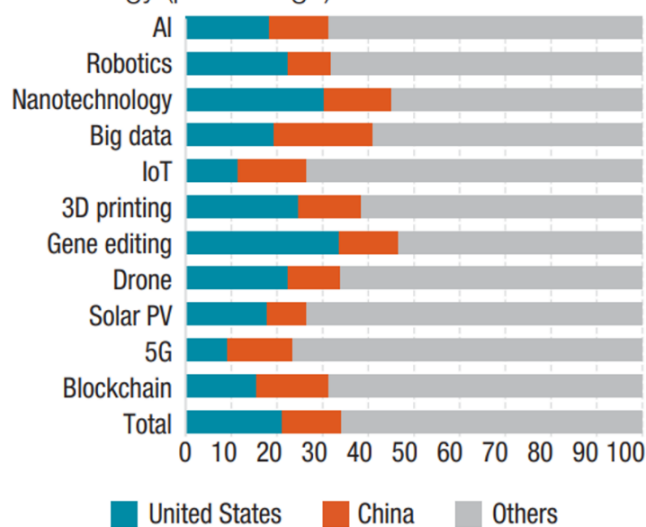
In the medium term, the benefits of greater digitalisation are likely to become more obvious for most people: remote working and digital solutions in healthcare will provide greater flexibility, while blockchain and NFTs will ensure respect for privacy and property rights. On the other hand, the impact of the use of digitalisation for malign purposes such as through cyber-attacks and the weaponisation of AI or synthetic biology is also expected to increase. There could be a growing gap between the 'winners' and 'losers' of the digital revolution, along generational lines, but also between those who have access to the skills and competences needed in the digital age and those who are excluded. If not addressed properly by

governments, these dividing lines could become a long-term challenge.

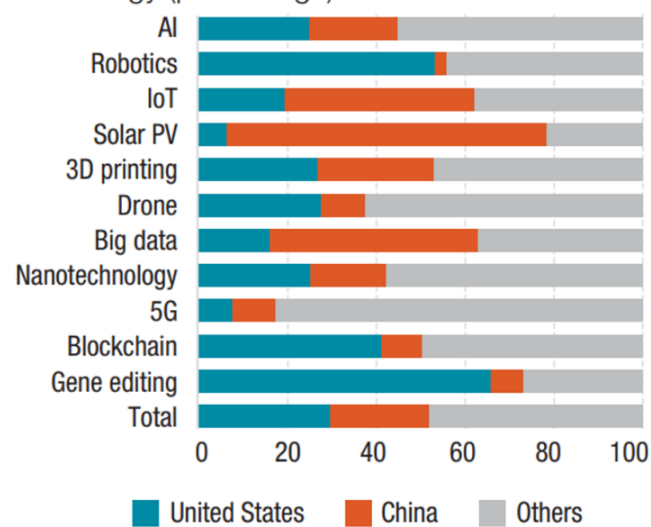
Global competition will require all players to actively promote and defend their approach and values. Dropping out of the race means accepting that others will set the standards for the digital future. Specific challenges could include the avoidance of a nationalisation of the global Internet and remaining in the space race. While agility and responsiveness will be key if regulation is to match the pace of technological change, innovation should not be stifled either. The centre of economic gravity in the tech sector is expected to shift to Asia, supported by initiatives such as the Chinese Digital Silk Road. This is a matter of concern, because in the race to be a standard setter in digital technologies, those with big tech sectors are likely to have an advantage over those who depend on third countries for technological innovations. While the EU has the research capacity to maintain a lead in technological breakthroughs (in gene editing, 4D printing, digital twins, quantum computing, Internet of Things, robotics), it needs to ensure that the conditions needed to turn them into successful businesses, such as access to venture capital, are in place. And in order to prevent resource-intensive digital technologies from contributing to climate change rather than helping tackle it, priority will need to be given to developing a greener digital model, including the opportunity to harbour green tech industries.

Figure 10: Share of publications and patents in different frontier technologies

Country share of publications by frontier technology (percentage)



Country share of patents by frontier technology (percentage)



Source: United Nations Conference on Trade and Development⁵⁶

Outlook for 2022: US-China tensions will shape the EU's digital future

In the year ahead, global geopolitical rivalry is expected to be increasingly played out through the technological sphere. This includes ongoing global competition over semi-conductors, standard-setting and 5G. Cooperation between the EU and US, in particular through the EU-US Trade and Technology Council, could encourage China to pursue cooperation with Russia and African countries, as well accelerate innovation in areas such as the development of the digital yuan, which is to make its debut at the Beijing Winter Olympics. At the same time, private individuals are expected to continue to expand their involvement. For example, by mid-2022, the next phase of Starlink launches – the satellite internet constellation operated by Elon Musk's SpaceX – should provide better maritime communications. In this context of competition and ever more rapid innovation, global powers are expected to look to strengthen and promote

their own digital model – a battle that will be highlighted by the election of the next Secretary-General of the International Telecommunication Union.

The move to digital during the COVID pandemic has accelerated some existing trends, such as remote working and telemedicine, and these are expected to continue in 2022. But the promotion of conspiracy theories and deepfakes on social media may further increase (for example in the context of election campaigns), along with cybercrime and the increased likelihood of large-scale cyber-attacks disrupting businesses and public services. Excessive use of the internet is believed to have a negative impact on the mental wellbeing of children and young people, and greater social media use is found to have the same effect⁵⁷. At the same time, 'digital immigrants' (those raised prior to the digital age) may increasingly find themselves losing out to digital natives. If not monitored and addressed, these negative effects will grow as the trend accelerates.

Impact on the European Council and the Council of the European Union

- The great power competition between US and China is expected to continue to pressure the EU's ability to build and promote its own digital model.
- At the same time, the objective of 'digital sovereignty' will require investments in a genuine European tech industry as well as strategic alliances to tackle dependencies. A forward-looking perspective to encourage future disruptive digital technologies will be important in shaping the EU's place in the global balance of digital powers.
- The speed of decisions and agility of the policy-making process will be key in a fast evolving digital environment.
- The acceleration of digital innovations will bring growth and benefits to people, but also harmful effects and security risks (especially if used by hostile actors, with private or public targets). Both need to be continuously monitored and taken into account in all discussions that touch on technological innovations.
- Anticipating the impact of automation on economic and social inequalities is a major concern for the sustainability of the digital transition. Addressing the negative effects on environment of digital technologies is also crucial for the wide public acceptance of digital and green transitions. While these challenges will need to be addressed largely at Member State level, coordination at EU level is required.

KEY TREND 5: CLIMATE & ENVIRONMENTAL CHALLENGES

Even in the most positive scenarios, efforts to cut GHG emissions will not be sufficient to compensate for past emissions and avoid a further increase in extreme weather events. Higher frequency and intensity of climate-related disasters as well as the costs of the green transition will cause tensions within societies, between Member States and globally. But the ubiquity of climate change could also lead to more European solidarity.

Long term: on the right path but still paying the price for past emissions

Although some of the positive effects of emissions reductions such as improved air quality could be already visible, others such as stabilising temperatures would take decades to manifest. More frequent and intense climate-related disasters with cascade effects will therefore intensify and put massive pressure on response capacities both in the EU and in the world. This will have a significant impact on populations, reconstruction costs, and on critical infrastructure, notably the electricity energy grid, which will be even more essential due to the need for massive electrification underpinning decarbonisation. Crisis response capacities might also be put under heavy strain again when dealing with a new pandemic and/or zoonosis. As the risk for a pandemic of the magnitude of COVID-19 stands at 2.5-3.3% annually, there is a

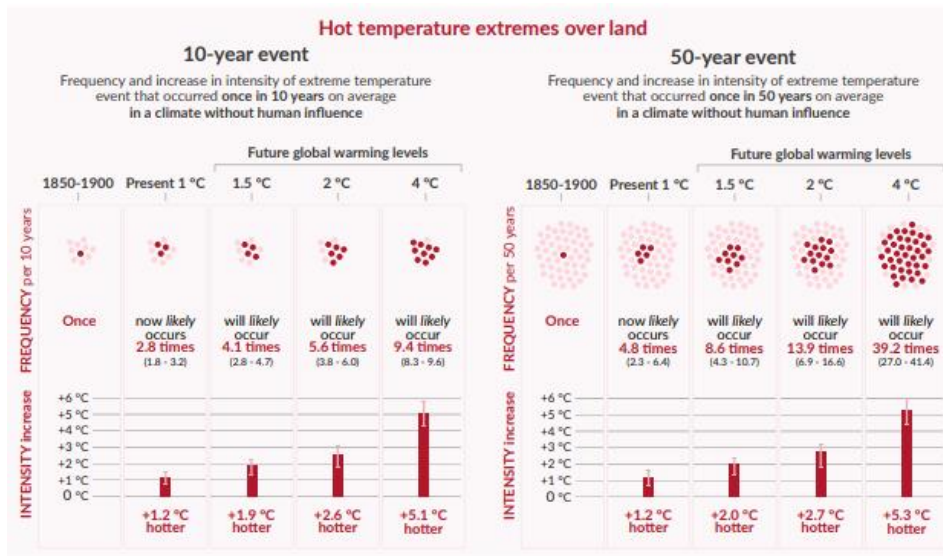
22-28% chance of a similar disease emerging within the next ten years⁵⁸.

Technological breakthroughs, supported by AI, may kick-in and mitigate some of the impacts of climate change, such as through the optimisation of processes, carbon sinks, developments in agriculture or even in the more controversial area of geo-engineering. In the energy sector, developments allowing for more reliable renewable energy sources could bring benefits both in terms of drastically cutting CO2 emissions and lowering the cost of energy and in turn reducing energy poverty.

In addition to increased migratory pressure from outside the EU, with some estimates predicting that there could be up to a billion environmental migrants globally moving within or across borders by 2050⁵⁹, intra EU migration as a result of flooding or desertification could become an internal EU issue.

Tensions between the haves and have-nots related to resources, both new ones related to the green and digital transitions and traditional ones, notably water and food, as well as on access to new technologies could rise globally and around Europe, generating new conflicts. Regions/countries whose economies were heavily dependent on fossil fuels will try to convert to green energy, with heavy economic and social costs which could give rise to instability and conflicts.

Figure 11: Projected changes in extremes are larger in frequency and intensity with every additional increment of global warming



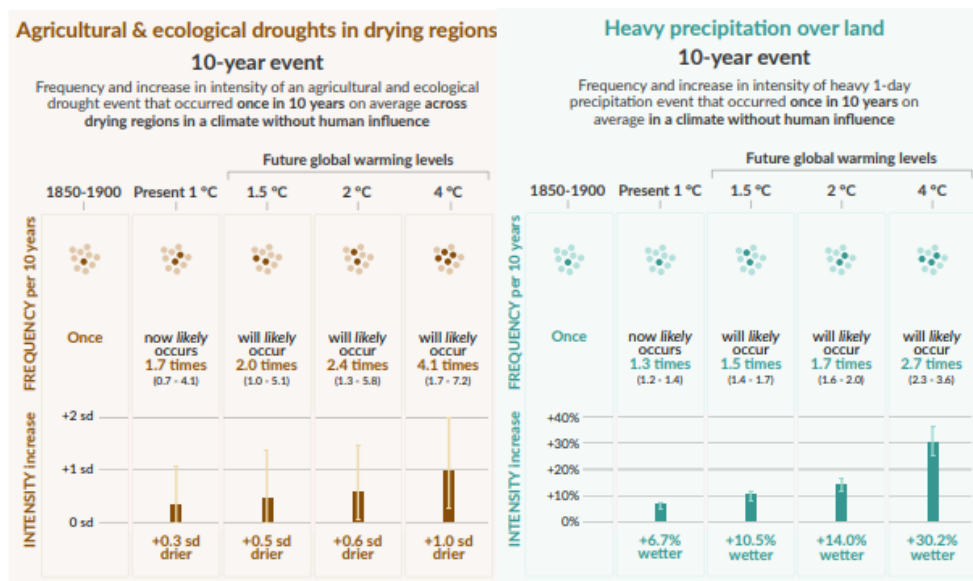
Source: IPCC⁶⁰

Medium term: it gets worse before it gets better?

The increasing occurrence of extreme weather events is expected to lead to greater realisation of the importance of achieving the green deal objectives. This may put more pressure on governments to accelerate the process, leading to additional costs and behavioural changes for individuals and industry. These challenges are likely to be accompanied by rising energy prices, exacerbated by the infrastructure investment required to support the massive electrification of the energy sector, the costs of repairs due to extreme weather events, and as a result of tensions in the labour market due to an uneven shift to greener jobs. All of these factors could lead to wider social tension.

The permanent impact of extreme weather events such as frequent droughts will increase the pressure on migratory flows from the South and East towards Europe, exacerbating tensions between frontline Member States and others. International tensions may rise as EU companies face a competitive disadvantage because of carbon leakage, the shifting of greenhouse gas emitting industries outside the EU to avoid higher EU environmental standards. EU Member States may also struggle to access some of the key resources needed for the green transition. Paradoxically, carbon fuel prices could go down as a result of an increase in production in an attempt from oil producers to secure the last profits from this energy source, disincentivising international decarbonisation efforts.

Figure 12: Frequency and intensity in increase of extreme weather events for different levels of global warming



Source: IPCC⁶¹

Outlook for 2022: growing realisation of the impacts of climate change while starting to feel the price of the transition

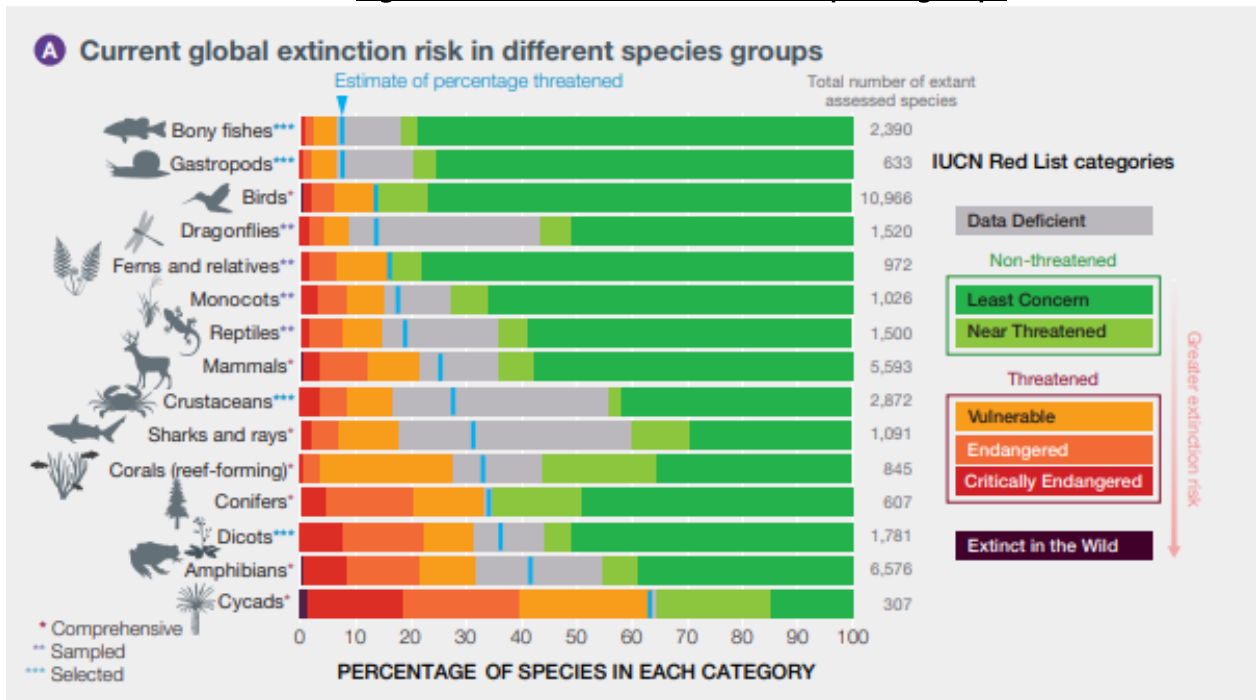
A record number of hurricanes, wildfires, and floods intensified by climate change cost the world \$210 billion in damage in 2020 alone. With an alarming acceleration in the increase of global temperatures⁶² reported by the IPCC already in 2021, 2022 is likely to see a continuation or an increase of extreme weather events. This could involve disasters occurring simultaneously across Europe, such as heat events and forest fires, super storms, flooding or extreme cold temperatures. This will put huge pressures on existing resources and in particular put the crisis response capacities of the Member States and EU under stress.

Consequences notably on food production, for

example due to the impact of pesticides or other practices on pollination, or on health of biodiversity losses and ecosystem deterioration⁶³ may add to the negative effects of climate change, leading to a permanent destruction of natural capital.

Disinformation campaigns may exploit the rise in energy prices or disruptions in the supply chains of key renewable-related resources in high demand. These campaigns may use the perceived costs of the green transition for industries and individuals, which now also affect heating and transport, to discredit efforts towards achieving the goals of the green deal. Coupled with the uneven impact of climate change on and the different price of the transition for countries, regions and people, affecting in particular the most vulnerable, this may generate tensions within society as well as between Member States.

Figure 13: Extinction risk of selected species groups



Source: IPBES⁶⁴

Impact on the European Council and the Council of the European Union

- The increase in the magnitude, duration and frequency of natural disasters will put pressure on the EU decision making process, requiring attention at the highest political level. This risks placing the focus on immediate crisis response and reducing the time available for decisions and discussions on important longer term issues.
- At the same time, in the light of the more even distribution of disasters among Member States in different parts of Europe (e.g. with forest fires also affecting northern Europe), there is an opportunity to strengthen EU solidarity and reinforce EU cohesion. This could pave the way for renewed initiatives to further boost the EU crisis response toolbox, drawing also on the lessons from the handling of COVID-19.
- Political attention might also need to be devoted to the consequences of possible tensions between the medium to long term objectives of the Green Deal and the short term impacts of the transition to renewable energy sources, affecting unevenly parts of society, generations, economic sectors and regions.

KEY TREND 6: DEMOGRAPHIC IMBALANCES

Throughout the 21st century the world will age significantly, albeit unequally. Preparing for demographic imbalances will require increases in public spending. Structural reforms following the COVID-19 recovery period could constitute the basis for tackling future challenges.

Long-term: an unequally ageing world

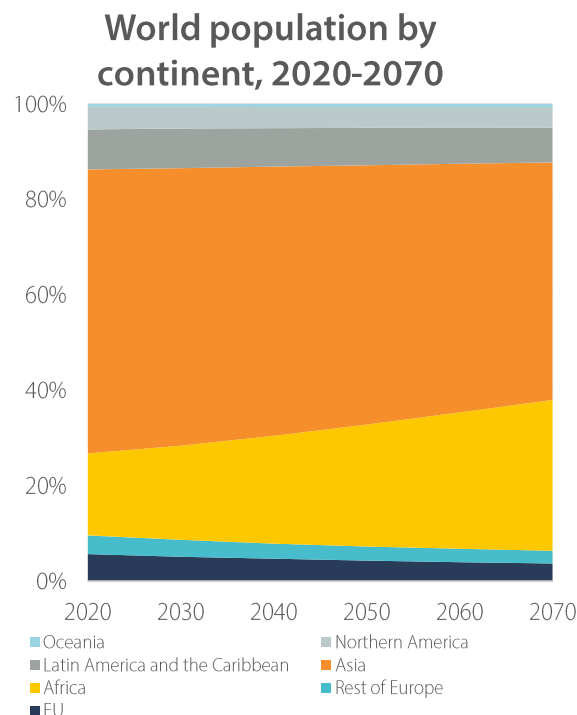
Whereas higher income countries will be faced with ageing and gradually decreasing populations, low income countries, especially in sub-Saharan Africa and the MENA region, are expected to grow rapidly⁶⁵. Imbalances will also emerge both within the EU and within member states: While all EU member states are set to age, those with thriving urban areas are likely to continue to see inflows of younger people. At the same time, if emigration from Member States in the east and south-east of Europe continues, this will create even greater problems as a result of depopulated rural regions, with mainly the elderly remaining⁶⁶.

A declining youth population means that the elderly, whose massive share of the voting population will dwarf the youth vote, will dominate traditional political decision-making⁶⁷.

This could lead to polarization along generational lines. If policies neglect the needs of younger generations, this could lead to further disillusionment with democratic processes. Limited employment opportunities for young people, especially in lower-income countries and less favoured regions,⁶⁸ could lead to social unrest and increasing migration flows into wealthier countries and regions. Meanwhile, a shortage of workers willing to sustain difficult conditions in unskilled jobs could cause challenges to supply chains in high-income countries.

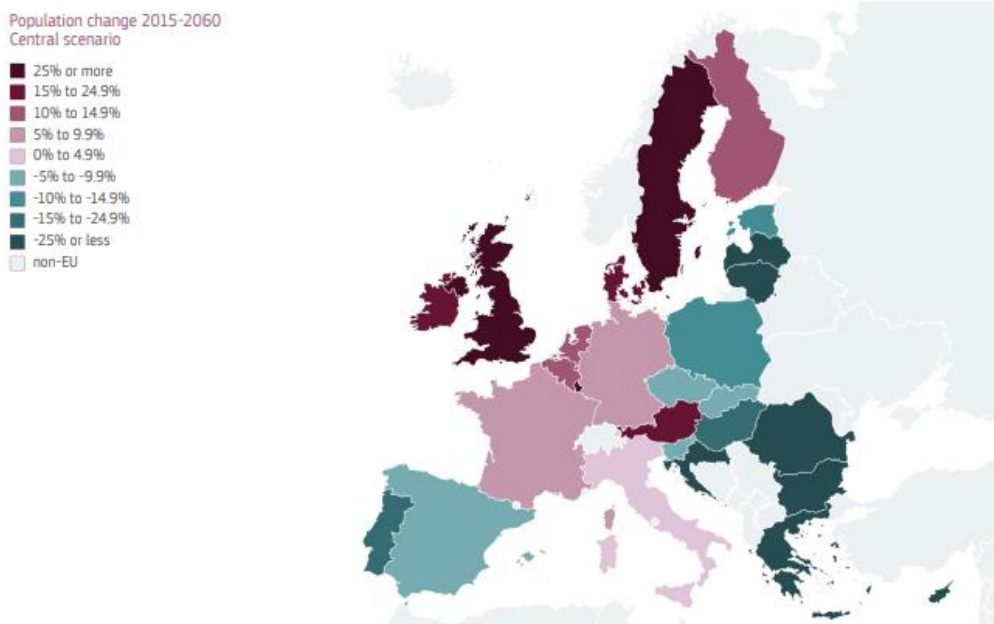
Economically, an ageing population means that fewer working people will have to support a growing number of dependents. The share of GDP devoted to health care and pension costs will increase across the EU. On average, 26% of the total GDP of a member state will be necessary to meet the needs of the elderly⁶⁹. With declining populations across Europe, output is set to decrease⁷⁰ meaning that future GDP growth will depend entirely on increases in labour productivity⁷¹. This could not only affect national budgets, but also the EU's global influence as its share in global economic output drops.

Figure 14: Predicted changes in global population shares



Sources: world population: GSC-ART based on UN⁷²

Figure 15: Predicted relative population change between 2015 and 2060 in EU member states and the UK



Source: European Commission: Joint Research Centre⁷³

Medium term: preparing for different dependency ratios

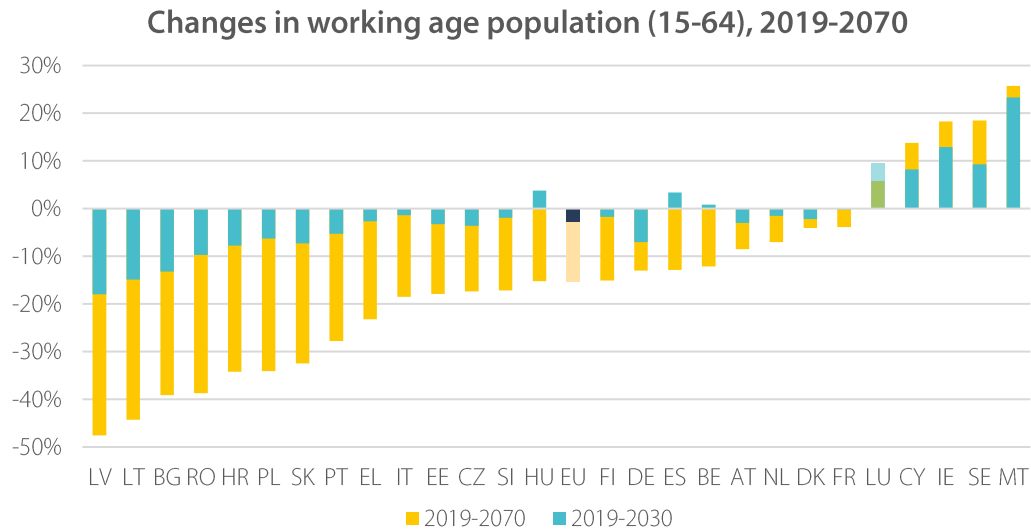
More pensioners with higher life expectancies and increasingly complex healthcare needs are already leading to higher pension costs and care-related expenses in the medium term, and this is expected to continue⁷⁴. Advances in AI and telemedicine could support diagnostics and access to medical care in rural areas, but remote healthcare would require significant investment in infrastructure and training for the less digitally skilled elderly population⁷⁵. Investment in lifelong learning and age-adjusted workplaces will also be key to helping keep the elderly employable⁷⁶, while rising old age poverty means that basic needs will increasingly have to be covered by the state.

A shrinking labour force together with an expansion in irregular forms of employment that do not contribute to social security costs means that traditional forms of income tax are unlikely to be sufficient to meet society's needs⁷⁷. New models of taxation, such as environmental or capital gains taxes may be required. Some governments may decide simply to run higher deficits⁷⁸. Measures to decrease age-dependency ratios will nevertheless become important. Raising the retirement age and increasing the

participation of the elderly, women, and migrants in the labour force could alleviate fiscal pressures⁷⁹, but increasing the length of working life could be a source of resentment amongst the younger generation. At the same time, a growing silver economy could offer new economic opportunities⁸⁰.

Although difficult to predict⁸¹, an increase in net migration to higher income countries is likely. This may well be encouraged by rising youth unemployment rates in lower-income countries⁸² and the effects of climate change⁸³. Better integration of migrants and regular migration channels into the EU could help mitigate regional labour shortages⁸⁴, whereas a failure to train and integrate migrants properly into the workforce could worsen age-dependency rates and increase the pressures on public expenditure⁸⁵. Wealthier countries could also be faced with pressures from irregular migration if they are unable to provide legitimate migration pathways or support economic opportunities in the countries of origin⁸⁶. Intra-EU migration is likely to continue, with the Baltic States and south-eastern Europe set to lose significant parts of their younger, skilled working population, thereby increasing regional imbalances⁸⁷. The erosion of communal ties due to emigration could also increase anti-migrant sentiment⁸⁸.

Figure 16: Predicted changes in working age populations of the EU-27



Source: GSC-ART based on European Commission⁸⁹

Outlook for 2022: COVID-19 recovery could have long-term effects

As the world continues to recover from the effects of the COVID-19 pandemic, the measures being taken to restart the economy could exacerbate existing demographic imbalances. Pandemic-related job losses have most affected women and the younger generations,⁹⁰ whose re-integration is crucial both to prevent lifelong income loss and old-age poverty⁹¹. The implementation of pension and social security reform which is part of some of the EU's Recovery

and Resilience Plans⁹², as well as the distribution of research and education funding, is set to encourage economic recovery, but could also create a basis for mitigating the effects of demographic change. The potential reinstatement of EU fiscal rules in 2023⁹³ could create the impetus for pension reform to balance budgets. As migration flows slowly return to pre-pandemic levels, there will a resumption of the debate on how migration can help mitigate the effects of a declining labour force, while the ongoing use of remote working could affect intra-EU and rural-urban migration⁹⁴.

Impact on the European Council and the Council of the European Union

- Although all member states will be affected by the ageing of populations, the impact on each member state will differ significantly. Developing common, coordinated measures to limit the challenges of ageing societies on an EU level will therefore be difficult.
- The current impact of intra-EU migration patterns is set to continue and could complicate decision-making as one region's losses could become another region's gains.
- Rising costs of preparing for ageing societies will affect debates around the future of fiscal rules and the use of funds from the Recovery and Resilience Facility. As the challenges from ageing populations have become part of the screening processes of the European Semester, issues such as pension and social security reforms will be important topics in discussions on fiscal sustainability.
- The pandemic has highlighted vulnerabilities in national health care systems and created some impetus for a European Health Union. This offers opportunities to increase cooperation on health care issues related to ageing populations, such as on reforming long-term care and telemedicine.
- With the current debate on migration focusing primarily on how to strengthen the EU's external borders, the EU and its member states risk losing sight of the potential for immigration to alleviate already existing labour shortages due to demographic change. Framing migration primarily as a threat could lead to self-harming policies that will worsen age-dependency ratios in the medium and long term.

KEY TREND 7: CHANGING POLITICS

Against a background of international competition between different political models, support for democracy and the rule of law is expected to continue to decline globally, while major challenges require global answers. In the EU, a combination of external pressures – global powers and external actors – and internal challenges – growing illiberal forces and polarisation – will put decision-making to the test.

Long term: From promoting to protecting a European model

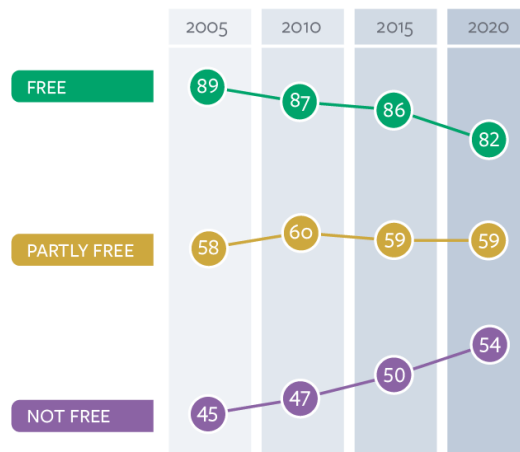
In the long term, international negotiations risk being further complicated by tensions between democratic models and autocracies. Whilst regional ‘blocs’ may be able to address some issues, many major challenges of shared interest (pandemics, climate, migration, trade, digital standards) will require effective governance at the global level. Defending and promoting EU interests, including through (modernised) international institutions, will necessitate coordination with like-minded partners who broadly share those values even if they are also commercial competitors. At the same time, as presented in the global fragmentation trend, China will likely continue to strengthen its influence through expedient relationships, trade ties and debt dependant partners⁹⁵. Despite their different aims and geopolitical interests, illiberal forces might join forces and

become embedded in the European political landscape. Using electoral interference, digital disruption, and disinformation, and covert backing for extreme political movements, external actors are expected to continue to exploit internal differences to try to destabilise the EU, limit its collective capacity to act and undermine the existing legal order. At the same time, regionalist movements might challenge the unity of states.

In this context, it is not difficult to imagine that private actors and tech giants could gradually reach into areas which were traditionally the preserve of public authorities, as already described in the digitalisation trend. On the other hand, the transnational nature of challenges could also lead to tougher regulation at EU level. While radical and innovative policies will be needed to deal with unprecedented global challenges, they might meet resistance. For example, a common migration policy as a response to Europe’s ageing population would face the politically sensitive issue of integration and identity; the digital transition could raise concerns over labour market changes and increasing inequality; and the long-term impact of the costs of the green transition might lead to discontent, particularly if perceived as unfairly distributed. In an era of profound transformation, information and education will be essential to ensure that society as a whole has a stake in these changes.

Figure 17: Changes in the number of countries considered to be free

A Shifting International Balance
In 2020, the number of Free countries in the world reached its lowest level since the beginning of a 15-year period of global democratic decline, while the number of Not Free countries reached its highest level.



Source: Freedom House⁹⁶

Medium term: COVID recovery - responding to variable voters expectation while keeping a long term common strategy

In the medium term, the worldwide decline in the quality of democracy is expected to last. If not reversed, existing trends in democratic life in the EU that were highlighted and intensified by the pandemic are also likely to continue, impacting electoral practice, freedom of expression and of the media, the role of civil society, the rule of law, and oversight of the executive. The same goes for corruption and tax avoidance, even though Europe is generally regarded as setting a high standard in this area. The slow erosion of some of the key pillars of liberal democracy could take different forms, depending on history, culture and tradition.

At the same time, broader political trends and the shift in political culture are likely to lead to a more fragmented political landscape, making the forming of coalitions more difficult and time-consuming. Once established, coalitions could turn out to be more fragile and unstable due to the volatility of their members. Despite some positive examples, the growth in the number of minority governments may increase the risk of political instability. Moreover, increasing polarisation and social unrest could put even more pressure on heterogeneous political coalitions. Radical opposition to the traditional political class could hollow out the political centre and undermine its instinct to seek compromise. The same applies to the traditional media, which will likely continue to be under pressure. A continuous 'tunnel of elections' (an election every month on average in the Union) will create further challenges for Member States as they seek to exit from temporary emergency measures and implement COVID recovery strategies.

Tensions between Member States are likely to rise as their electorates push them in different directions on issues such as globalisation or

common border protection, depending on their geography or their economic dynamic (see also the trend on evolving economic models). A confrontational approach between world leaders ('strong men'), but also within the EU for electoral purposes, could increase public tension, in a context of permanent polemics along the lines pushed and used by populists.

Outlook for 2022: A year of political recovery against an uncertain future

Given the continuing impact of COVID, governments will need to ensure that the unprecedented restrictions on the lives of their citizens needed to contain the virus have the full support of populations they are intended to protect. This is likely to be increasingly difficult the longer the pandemic lasts. Fatigue amongst the general population is growing, which can lead to an increase in resentment against traditional political parties, elites and established institutions. This is in turn being exploited by populist movements and their leaders. At the same time, the economic recovery from the pandemic could - at least in the shorter term - serve to boost support for those in power, although that will very much depend on the extent to which the benefits of recovery are shared across society fairly.

2022 will be marked by elections and the arrival of new governments in major Member States. Populist parties across the EU, including those in government, are likely to use the appeal of identity-related issues to continue to try to shift the debate from economic to social and value-related issues. A defining uncertainty for 2022 is the extent to which populist forces choose to work together, and if so, how successful their cooperation might be. It could take the form of formal cooperation (for example the creation of a separate political group in the European Parliament) or a more ad hoc arrangement constituting a blocking minority in the Council depending on the issue.

Impact on the European Council and the Council of the European Union

- A fragmentation of positions within the EU could increase as a result of electoral campaigns that focus on dissatisfaction over handling of the pandemic. Since a social reaction and possibly public unrest can appear up to two years after the end of a pandemic⁹⁷, public dissatisfaction will need to be closely monitored.
- The changing political landscape is likely to affect the capacity to manage important issues such as the social impact of the green and digital transitions; at the same time, the economic recovery could also help crystallise support within the EU for new and radical policies to support the twin transitions.
- A more coordinated and structured approach by populist forces within the EU institutional framework could impact political choices from the inside and will contribute to an increased polarisation of European issues. This could put the EU on a more defensive line, and make it more challenging for the EU to address hybrid threats
- The western democratic model will be challenged by external hybrid threats from authoritarian regimes. In the case of foreign policy, a further shift to popular politics could lead to increased fragmentation and greater difficulty in shaping and holding an EU line in the face of stronger needs for international governance.
- At the same time, the potential for enhanced transnational political cooperation to address global challenges may increase.

Conclusion

The seven trends described in this report paint a rather gloomy picture of the decade ahead. But the future by definition is far from certain, and there is no inevitability about the path of any one trend. The most we can predict is that Europe's future will almost certainly draw on elements from each of the trends, at different times and in different places. The analysis in this report makes no claim to be a forecast, but rather sketches out a range of different trajectories with the aim of raising awareness and of suggesting ways in which they might be steered in a way which best serves Europe's interests.

This trend analysis serves firstly to underline that Europe's future is increasingly inseparable from the wider global context. All of the trends have a geopolitical dimension. Together, they suggest that we are entering a new era of geopolitical rivalry and tension, in which the role of the West is reduced, and the exercise of power trumps interdependence. This makes it more difficult to find common solutions to global problems. Europe will increasingly need to look outwards and to be receptive to other worldviews. That includes being open to understanding that how others view us may not be the same as how we want to be viewed. We rightly lay emphasis on ourselves as a community of values and - to some extent - as a beacon for the rest of the world. Yet others increasingly see us through the prism of power play, with the EU operating as an entity in which interests take precedence over values, and define us in terms of spheres of influence.

Secondly, the trends interact and form a dynamic complex, as illustrated in the graphic below. This interaction can reinforce certain positive developments such as the use of technological innovation to help fight climate change and address the issues of an ageing population, thereby creating a virtuous circle. But they can also generate a negative dynamic, such as when natural disasters have disproportionate impact on the most vulnerable, who in turn are less able to rebuild their lives, so reinforcing structural inequalities.

Over the next decade, as digital rivalry becomes both a driver and a tool of geopolitical tension, physical and digital borders will come under strain, and value chains will be redefined.

Meeting challenges such as climate change and demographic shifts will call for difficult political choices that look to the long-term and which will have a major impact on our lives. That requires political leaders to be completely frank about what these choices will mean. Frankness about the future and planning policy for the long-term do not sit easily with democratic systems that tend to focus on immediate delivery. Since the twin transitions are taking place against a backdrop of democratic fatigue and competing global political models, the interaction between trends in this paper could sow the seeds for (new types of) conflict as well as generate challenges for European cohesion.

It is clear that 2022 will once again test the solidarity, decision-making capacity, and geopolitical strength and image of the Union. But trends are not pre-determined. Each presents opportunities for action and offers scope to influence the direction of travel. This will require regular dialogue between Member States in order both to benefit from each other's experience and - importantly - to plan strategically. Even for those areas that fall within Member States' competence, dialogue can, and should, be used as a tool for learning and peer evaluation.

Inevitably, discussions at the highest political level tend to focus on immediate issues that require urgent solutions. But longer-term trends need to be managed if they are not to run the risk of developing into major structural problems. Leaders can take advantage of the opportunities that are an integral part of each trend and so help shape their future trajectory. Even if we do not know exactly what the future will bring, trend analysis can help anticipate challenges and identify possibilities. This should help the European Council and Council to play a role in ensuring that the EU as a whole is more resilient and better prepared.

**Evolving economic models –
climate & environmental**

The green transition requires huge investments and will profoundly change our economies. Economic considerations will be decisive in the success of its implementation.

**Polarisation –
changing politics**

In polarising societies, reaching consensus becomes ever more difficult, which creates a fertile ground for populist movements.

**Changing politics –
demographic imbalances**

Generational divides in political engagement impact the representativeness of democratic elected bodies and influence policy priorities.

**Digitalisation –
polarisation**

Echo chambers and bubbles on social media affect people's perception of both other groups and reality itself.



**Global fragmentation –
evolving economic models**

The geopolitical balance of powers defines global economic relationships, while at the same time economic dependencies shape new alliances.

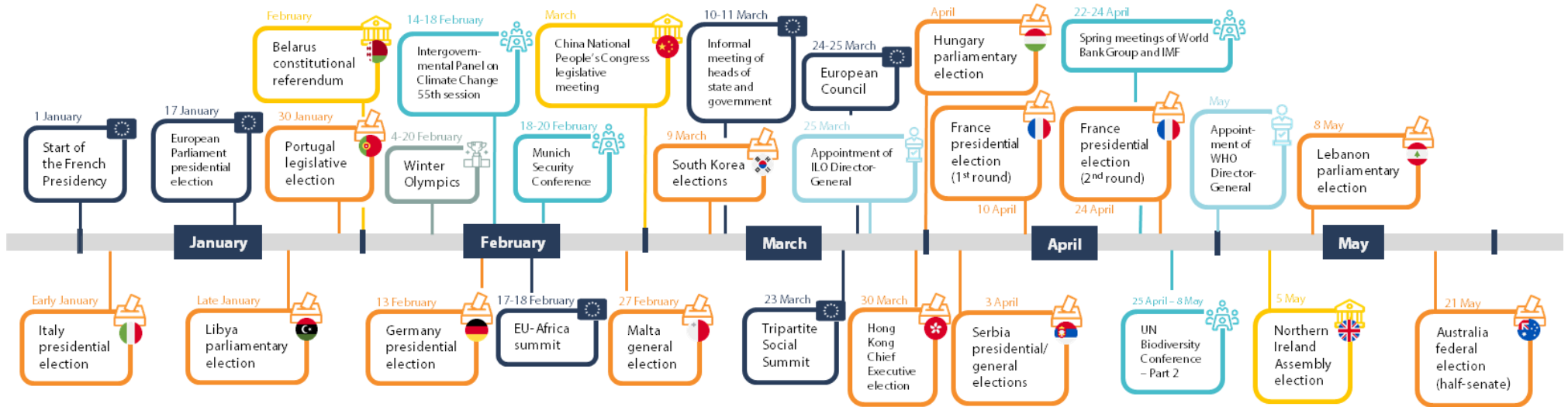
**Demographic imbalances –
digitalisation**

While digitalisation and AI offer advantages in long term care for an ageing population, a large digital divide between generations and geographical regions is looming.

**Climate & environmental
challenges – global fragmentation**

An increase in conflicts over natural resources and international tensions due to a race for new resources and technologies define a new geopolitical map.

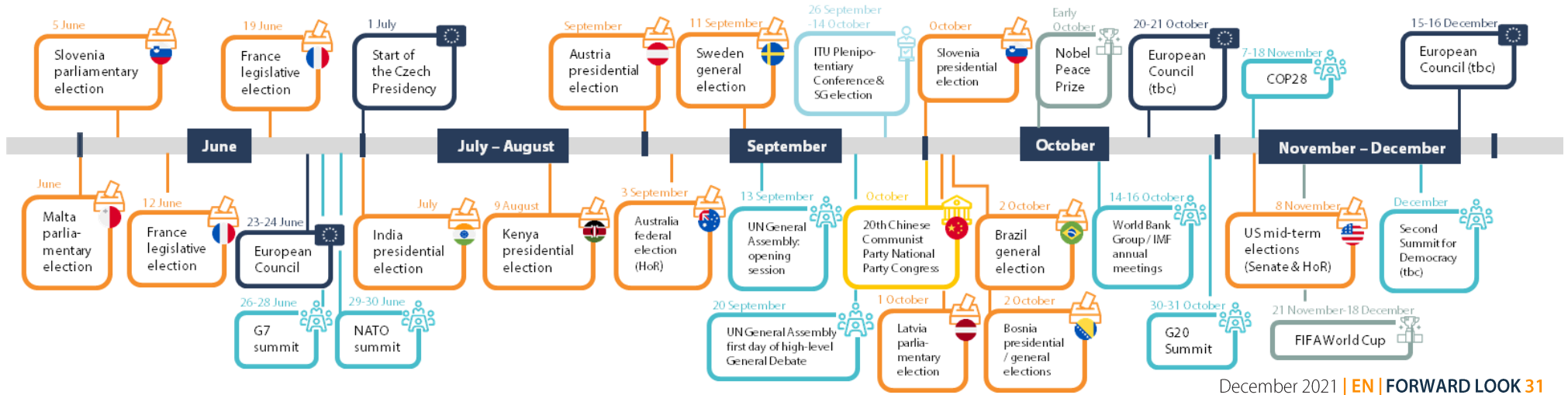
ANNEX



elections	national political events
EU events	International appointments
multilateral summits and events	cultural events

Events to watch in 2022

- 12th WTO Ministerial Conference
- World Economic Forum
- To be announced
- G20 finance track
- EU-China summit
- Second EU-US Trade and Technology Council



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