Globalization Scenarios

Challenges and responses from the perspective of German business

With support from BDI Bertelsmann Stiftung
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INTRODUCTION

The global economy is experiencing a period of rapid upheaval. Technological advances and growing rivalries are tugging at the world’s power structures as major economic players engage in a geostrategic competition. The United States, China, Europe and other ambitious actors must align their economies to reflect the emerging realities. The Covid–19 pandemic, moreover, is giving this development both a unique dynamic and an indefinite outcome. What the world order will eventually look like remains completely uncertain.

In light of the many possible contingencies, the Bertelsmann Stiftung, with support from the Federation of German Industries (Bundesverband der Deutschen Industrie, BDI), organized a series of workshops at which various configurations of future developments were discussed along with their impact on the German economy.

In cooperation with the Fraunhofer Institute for Systems and Innovation Research (ISI) and representatives from business and politics, five scenarios were developed on what the future of globalization might look like. The scenarios served as the basis for some 30 discussions involving over 70 participants from business organizations, trade associations and political institutions. The key questions were the impact the individual scenarios would have on German companies, along with potential responses and strategic conclusions.

The methodical development of the scenarios’ qualitative analysis provided the basis for the discussions. The timeframe for the thought experiment focused on the year 2030. Two factors were defined as particularly relevant. On the one hand, the relationship between the US and China was considered, along with the question of whether the two superpowers would gravitate towards confrontation or cooperation. On the other, consideration was given to the future role of the European Union – as a potent shaper of world events or a pawn of the major powers.

Two of the scenarios depict a world in which the EU is a forceful player – in one case, against the background of a revived multilateralism (Reformed Multilateralism); in the other, within the shifting tensions caused by the superpowers taking a confrontative approach (World with Multiple Blocs). A third scenario describes a world in which China and the US engage in a protracted conflict, with the EU caught in the middle (World in Permanent Crisis). The possibility was also discussed of both superpowers standing side by side, dominating the globe as they develop shared interests (G2). The fifth scenario (Cold Peace) was treated during the discussions as the continuation of today’s status quo.

The participants used these models to consider in concrete terms what the individual scenarios imply for the German and European economies, and to develop informed strategies and longer-term responses that the business community can take. The focus here was on practical considerations: How might German companies react to a world that fragments into different blocs, or one in which the US and China resist (at least in part) the trend towards globalization? How would German players and industries adjust to these new framework conditions?

The scenarios merely suggest events that might occur; they do not provide definitive predictions of the future. They describe which happenings
are conceivable and which are probable, and illustrate how policy makers and businesses could potentially respond under the various conditions. The study presented here reflects the content of the discussions and offers possible strategies for those grappling with such challenges within their organization.
US, EUROPE AND CHINA: THE THREE REGIONS IN COMPARISON

Sources: The World Bank, DataBank, World Development Indicators; German Federal Ministry for Economic Affairs and Energy, Statistics on German foreign trade.
*Figures for the European Union (EU).
COLD PEACE

The West joins forces. The US, Europe and like-minded partners serve as a counterweight to China’s sphere of influence.

DESCRIPTION

National politics and bilateral relations play a crucial role. The Western democracies (the US, EU and their partners) are confronted with an authoritarian power bloc led by China’s one-party state. The spheres of influence of both major blocs are clearly delineated. Despite its close ties to Western partners, the EU attempts to maintain its relations with China and other regions (e.g. Russia), which becomes a bone of contention for some in the Western alliance.
The US is the leading power in the West; the EU is the junior partner. Yet the US’s leadership role is not absolute. Europe tries to maintain its autonomy and expand its influence in the world. China works to establish new international institutions and to include Russia in the creation of an anti-Western bloc. The US and Europe want to join forces with like-minded states, such as Japan, South Korea, Australia and India, to establish new supranational structures based on democratic values. Chinese initiatives like Belt and Road try to contain these structures, for example by strengthening multilateral institutions, such as the World Bank and the Asian Development Bank, and increasing their influence in the corridors of the New Silk Road.

World trade is marked by two competing but not wholly encapsulated trading areas with different value networks. The World Trade Organization (WTO) is helpless in the face of this bipolar development and unable to prevent the fissure from widening. After many years of estrangement, the EU is not so close to the US that it accepts the latter’s standards and values unconditionally. The EU does not want to be merely a “tag-along,” but attempts to forge its own path so it can respond more autonomously and prevent itself from being used as a pawn should there be an escalation of the Cold Peace. Europeans and Americans strengthen the transatlantic connection and found new global institutional structures that categorically exclude the competing Chinese/Russian bloc. These structures are the result of the new transatlantic alliance with the European Union, yet they also welcome India, along with South American and African states. The new structures are meant to provide a super-structure for the Western nations’ bilateral agreements, simplifying the plethora of rules and regulations arising from the many bilateral agreements and offering a response to Asian initiatives such as RCEP. Beijing looks beyond these structures for partners for additional free trade areas. Trade between the major blocs becomes more complicated, costing China its unofficial title as the globe’s leading exporter.

Both blocs spend heavily on security and defense. Security cooperation gains in importance. NATO is reformed along the lines demanded by Washington. EU member states must shoulder a much larger share of the costs within the transatlantic alliance. China is alarmed and attempts to cooperate more closely with Russia. Third states increasingly become the site of armed conflict and proxy wars, turning the global security architecture into a fragile construct.
In terms of economic policy, the US, the EU and their like-minded partners collaborate in key industries and future technologies. At the same time, each player pursues its own economic policy. Mistrusting the authoritarian bloc, the EU follows to some degree the trend towards national security evident in the US, thus banning some Chinese products from the European market. This is one reason why China is unable to reach all its industrial policy goals. Moreover, the country continues to lack technological autonomy in many sectors of the economy. The Chinese government reacts with a rigorous, state-capitalist economic policy that lays out a clear line the country’s businesses must follow, allowing them little leeway. European and, in particular, German companies are increasingly caught between the two fronts. Pressure mounts within the transatlantic alliance to choose between the US and China, or at least to reduce dependencies on China.

In terms of key technologies, the EU and US cooperate very successfully in several areas by combining their expertise. A major driver here is the desire to gain the greatest possible independence from authoritarian China. Europe begins producing more once again; the US dominates the data economy. Security, including data security, plays an especially important role here. At the same time, the Europeans succeed in retaining their high standards of data protection and privacy within the alliance. Successful projects such as GAIA-X allow the EU to strengthen its digital sovereignty. Around the globe, innovations are instrumentalized politically. Yet the blocs’ separate technological solutions generate high costs. China attempts to compete by implementing innovation programs that are controlled at a high level within the state structures. It also insists that know-how be transferred and engages in industrial espionage. Beijing also signs bilateral agreements with other countries in order to create a sphere of influence in which Chinese technology predominates and lock-in effects can be achieved.

There is fierce competition for energy and natural resources. Top priority for the Western bloc is to become independent of China, but also of Russia’s natural gas. As a regional hegemon, China attempts to dominate the Asian realm as a supplier of energy and raw materials in order to guarantee its own access to raw materials. Shipping routes for natural resources and long-haul pipelines for gas and oil are secured through a major commitment of military resources.

In terms of norms and standards, Europe prevails now and then, but must largely allow the US to take the leading role. Many industrial and technical standards from the US thus become norms in the EU. In the meantime, China promotes its own standards, ensuring they enjoy primacy within the authoritarian bloc. Yet Beijing also uses bilateral agreements as a way of increasing its influence. Many European companies face the dilemma of deciding in favor of one side or another, since they cannot readily meet both blocs’ requirements or must pay a high price if they do.
Both sides try to advance their own narratives through the use of traditional and social media and by influencing elites. They also try to be seen as the authoritative interpreter assigning meaning to relevant events. Yet since the fronts become increasingly uncompromising not only economically, but also culturally, large segments of the public are distrustful of the other camp, so that propaganda is quickly exposed as such and viewed critically as a result. Both sides concentrate their communication efforts on those segments of the world striving to remain neutral, as a way of advancing their own narratives there and exploiting each and every power vacuum. In doing so, the Western bloc defines its model as a combination of liberal values and economic strength and consistently promotes the principle of good governance.

Academic partnerships continue to exist in the Western bloc and grow stronger within the transatlantic alliance. Conversely, many ties to China are cut. The latter attempts to develop its own initiatives with other partners. Talented individuals generally have the opportunity to advance their research and careers in both blocs, leading to global competition for the world’s best minds. Despite its financial resources, however, the authoritarian bloc often finds itself playing the weaker hand, since considerable doubt about the independence of its academics compromises the image of the research carried out and reduces the willingness to cooperate.

Environmental policy is coordinated less and less on a global scale, and increasingly decided within each bloc instead. Combatting the causes of climate change becomes an afterthought, and environmental policy devolves into a “blame game” between the two blocs. Limiting the consequences of climate change gives rise to a hotly contested market: The Chinese see an opportunity to set global standards here; the Western partners try to find responses to China’s approach, above all through the use of technology.
IMPACTS

What does this mean for the German economy?

In this scenario, which was largely treated as a continuation of today’s status quo, all markets are relevant for most European companies. North America, Europe and China (as the focus within Asia) are the most important regions. Some companies, however, must adjust to having separate production lines for regulatory reasons. The mood in the business community is subdued due to fears that political pressure could force companies to decide in favor of either the Chinese or the American market (decoupling). In this scenario, the influence of power politics increases on key technologies, e.g. through standardization and certification, making life even harder for companies. The Americans also make their willingness to strengthen transatlantic ties dependent on the loyalty of European businesses. Companies thus face added pressure from the US to at least refrain from intensifying their cooperation with China.

How do German companies view global markets?

In the Cold Peace scenario, companies attempt to navigate between being commandeered by politically dominant players and maintaining a presence in important markets. Even if the peace is a cold one, companies still have more leeway than in a scenario involving confrontation and conflict. Demand remains constant for the time being and, with it, the potential for stable sales. Hovering over everything, however, is the fear of a further escalation between the US and China, something that is regularly expressed in punitive tariffs and other economic sanctions, and thus has ramifications for all globally active companies.

What role does the European market play?

The European single market is still crucial for the German economy. However, the US and Asia, at approximately 30 percent each, remain equally important pillars for the business strategies of many companies. At the same time, the companies’ trust in the European market is limited; in many sectors, the European single market is still fragmented. Major investments, for example in digitalization, seem risky, since economies of scale are hard to achieve given the small market sizes. The global shift in markets is also not in Europe’s favor. For a long time, German companies were able to expand their business in Asia or other global regions without impinging on their sites in Germany or Europe. Yet in many industries, the trend is now heading in a different direction. The automotive industry is one example: German automakers have long produced more vehicles in China than in Germany and cannot avoid further integration into Asian economic structures. In many other sectors as well, German companies are under more and more pressure to reduce their investment in their home region of Europe and boost investment in Asia and North America.

Regional free trade agreements also counterbalance uncertainties in a Cold Peace, since they facilitate market access, reduce the costs of bureaucracy and lower tariffs. Standardization within free trade areas makes it easier for businesses to plan. In this scenario, a transatlantic economic agreement and other pacts between Western states make it possible to establish global standards. Without agreements of this sort, German businesses would face considerably higher costs in the Cold Peace scenario, in part due to the need to build regional centers for research and development.

Their strong networks allow German companies to maintain reliable global supply chains, even in times of a Cold Peace. In light of the Covid-19 pandemic, many companies have re-examined
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The space to which they can return for production and sales varies markedly from industry to industry. Complex process chains cannot be realized using only technology based in the EU. Nationalistic tendencies threaten to cause additional damage. The transatlantic bond is an important relationship for Europeans, but also a delicate one. Americans could repeatedly demand that Europeans demonstrate their loyalty, for example by calling on them to reduce their engagement in China. European companies thus face the question of whether and to what degree they should fulfill these demands – and which practical consequences they must fear if they do not align their business operations with Washington’s geopolitics. This is especially true since, in this scenario, China threatens to punish European companies as soon as they are seen to be too friendly with the US. Counterreactions on the European side threaten to unleash waves of protectionism. In a Cold Peace, even traditional German companies feel compelled to further internationalize their ownership structures by adding Chinese or American shareholders in order to better their chances on the corresponding market. Business ties to Germany are loosened as Europe becomes weaker. The relocation of research and development to regional centers around the world leads to a reduction in resources available in Germany. Many engineers and researchers choose to move abroad, especially to the major cities in the US and Asia where salaries are higher. This also applies to many European companies. The EU is increasingly forced to adopt standards from abroad in order to avoid being left behind completely. Patents are still at risk in China, in particular when foreign companies there find themselves at odds with state interests. Chinese laws promise to protect patents, but this is not the case in practice. The separate worlds of technology inflate costs due to the increased red tape involved in documenting space to which they can return for production and sales varies markedly from industry to industry. Complex process chains cannot be realized using only technology based in the EU. Nationalistic tendencies threaten to cause additional damage.

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Fear of an escalation that burdens international trade relations causes some players to establish production sites in other regions instead. This continues a trend that began years ago: Investment in Germany declines while it increases in the US and China. Both rivals demand that businesses produce more locally. Companies market themselves as “local for local” to make the most of their proximity to customers. More and more, application development happens on site. Decoupling is most advanced in the area of data, which must be stored in the country in which the data are generated. To reduce costs, “Cloud&Country” solutions are used instead of setting up data centers in each country.

Which particular opportunities and risks are inherent in this scenario?

RISKS

The greatest risk in a Cold Peace would be an escalation of tensions between China and the US. The danger here lies in punitive tariffs, diverging standards, incomplete supply chains, and the threat of having to declare political allegiance to one bloc over another. The uncertainty has a negative impact on investment. The EU’s ability to offer companies a viable future by serving as safe
the share of technology present in any given product. At the same time, they reduce the flexibility companies would otherwise gain from close global connections.

**OPPORTUNITIES**

The Cold Peace scenario offers the German economy greater opportunities compared to the Permanent Crisis or the World with Multiple Blocs scenarios. The Americans are willing to make greater concessions to Europeans in order to create a global counterweight to China. To strengthen their junior partner, US companies begin investing more in the EU once again. The EU is able to derive a political advantage from its role as a technology supplier to China and draw attention within the new transatlantic partnership to its own importance for the Western alliance. China, meanwhile, also makes concessions since it wants to avoid a rupture with the EU at all costs, despite the Europeans' affinity with the US. The EU succeeds in developing standards for the Western bloc in a few key areas such as data protection that the US agrees to accept. It convinces the US of the urgency of limiting the impact of climate change as much as possible. European technology, which sells very well within the Western bloc, is particularly helpful here. Supply chains become more resilient because political conditions have been making diversification necessary for years. European companies are able to respond rapidly to crises and keep their supplies flowing.
Scenario

WORLD WITH MULTIPLE BLOCS

The EU asserts itself next to the US and China as the world’s third major bloc. Other blocs are possible, for example under Russia’s leadership.

DESCRIPTION

This scenario assumes that the world is divided into multiple dominant blocs. And while these power centers interact with each other, they are clearly demarcated from each other: The democracies in the US and Europe face off against autocratic China, where the Communist Party has a monopoly on power. These political systems compete aggressively against each other over which form of governance is more effective, on the one hand, and over which can offer its citizens more prosperity, security and opportunities, on the other.

In the 2020s, through a great deal of close cooperation, the EU has managed to establish itself as a meaningful player on the global stage, finding its own self-assured role between both superpowers. During what was a turbulent decade, the EU member states succeeded in maintaining and strengthening their unity. This show of strength has given the Union considerable self-confidence and earned it growing respect around the world. By closing ranks politically, the EU has gained relevance globally,
allowing it to formulate and more easily assert its economic and political interests. Around the globe, Europe stands for democracy and diversity. The EU succeeds in balancing interests and the distribution of wealth by fostering healthy competition that, thanks to government impetus, generates new technologies and “green growth.” Enjoying a favorable image in the global community, the EU positions itself as the “likeable third” in the triad of major powers, between China’s dictatorship and the internally divided US. At the same time, the Europeans feel a much greater affinity with the US than with China.

The formation of blocs has weakened the multilateral system, however. Global institutions, such as the United Nations (UN) and the World Trade Organization (WTO), have become pawns caught up in geopolitical conflicts and have thus lost influence and meaning. Regional structures and new institutions increasingly interject themselves into this vacuum. The EU is one of the winners, proving its worth as a well-functioning regional alliance.

All the major blocs attempt to force other states to form ties with them, using sometimes aggressive political, economic and military means. China’s Belt and Road Initiative (BRI), for example, is intended to create new prospects for the country’s domestic economy while expanding its geopolitical sphere of influence. In addition to the three main blocs, states such as Russia and Saudi Arabia seek to establish their own regional blocs.

The EU always acts in accordance with the credo of defending openness. Nevertheless, it views restrictive measures as unavoidable and introduces a “carbon tax,” for example. The EU can serve as a valuable partner to smaller countries, including to help resolve trade disputes.

Since the WTO has been greatly weakened, it plays little role in trade policy decisions. Regional free trade agreements shape global trade instead. Some agreements attest to a high level of integration, others set only minimum standards so that trade is possible at all. These discrepancies harbor new potential for conflict between the dominant blocs and the rest of the world. This, in turn, increases the threat of direct or indirect military conflict. All blocs spend large amounts on defense, investing heavily in conventional weapons and in cybersecurity.

Since the EU has long neglected to develop its military capacity, it has considerable catching up to do. The push to create a common security policy results in greater integration within the EU, including in the form of a common army. Europe, however, remains dependent on its alliance with the US, which is shaped largely by conditions set by the US – i.e. as NATO 2.0. Conversely, China and Russia could possibly form their own alliance. Military conflicts are also carried out regionally: Europe is mostly insulated from the US-Chinese conflict in the Pacific, but must assume greater responsibility for disputes in its own neighborhood.
Given that the rival blocs can use their own technologies and trade to exert power, all players are careful to reduce their mutual economic dependencies. Since the US and China go it alone pursuing national policies in many areas and thus distorting global competition, the EU is forced to do more to protect its markets.

Industrial policy moves to the center of national and European economic policy, accompanied by heated discussions about the openness of the EU’s markets, reciprocity and investment screening. Thanks to a consistent industrial policy, the EU succeeds in creating “EU champions” in several key sectors. The main intention is ensuring independence in the area of high technologies: Self-sufficient solutions are meant to forestall the threat of dependence on another bloc. Thus, technology becomes a major geopolitical factor and essential to the blocs’ negotiating power.

Norms and standards play a crucial role here: All three major blocs try to dominate in this area or to set their own standards, which then apply to their own economy and to their allies.

Raw materials are highly contested (race for self-sustainability). It is not so much the global market that guarantees access to resources as political alliances. Elsewhere in the world, individual states try to establish themselves as strategically important players.

The major blocs compete to set narratives and assign meaning to events, hoping to gain an advantage as the different systems clash. The competing efforts are meant, above all, to influence and drive public opinion. Tightly controlled Chinese media and Internet companies face off against the West’s digital thought leaders as instruments of rhetorical confrontation. The Internet becomes the arena for a tit-for-tat reminiscent of the Cold War. Since none of the players trusts the others’ platforms or wants to contribute to their economic success, the world fragments into several technological spheres (US: Twitter, YouTube, Facebook, etc. China: Wechat, Weibo, Alibaba. Europe: The EU does not yet have sufficient digital potential of its own to do without other, primarily US-based providers.)
Nevertheless, Europe also succeeds in setting standards in cyberspace – such as the General Data Protection Regulation (GDPR) – that serve as a model in many parts of the world. The European Central Bank (ECB) has consistently driven the development of a digital euro and significantly narrowed the gap with China, where the digital yuan has long been a reality. Through its digitalization efforts, the ECB paves the way for the euro to become an international reserve currency, one that has greater appeal for many of the world’s players than its Chinese counterpart.

Education and science are also geopolitical factors of immense importance, which means that know-how and patents are no longer so readily shared internationally. Due to fierce competition, the three major blocs invest heavily in education and research. As was true during the Cold War, a competitive struggle ensues for the services of the world’s best scientists and experts. The ever-present threat of espionage and stolen research poisons the atmosphere, fostering mistrust and fear in scientific and academic circles.

Since there is no multilateral intermediary to guide the process, the three blocs are also unable to agree on a globally coordinated climate policy. For the most part, climate protection now only consists of fragmented, regional measures. Instead of actively combatting climate change, actors in many places are only concerned with adapting life in their own region to changing climate conditions.
In this scenario, the EU has – and makes use of – the opportunity to set standards in the areas of consumer protection, data security and climate friendly products. European businesses benefit from this.

The EU is important to companies not only as a market, but also as a political ally. A strong Union is able to negotiate favorable conditions for trade and market access with other states and to make European interests heard.

Yet from the perspective of Germany as a business location, the World with Multiple Blocs scenario is the better of the two involving an ongoing conflict between the US and China. In contrast to the World in Permanent Crisis scenario, German companies benefit from a stable European single market and an EU that is strong and self-confident vis-à-vis China and the US. In a turbulent global economy, the EU stands for reliability, rule of law and effective mechanisms for conflict resolution.

Although the global economy in this scenario is rife with political uncertainty, German companies can still do business knowing that the world is their market. For German firms, both the US and China remain important, if often difficult markets in this scenario. At the same time, the development of new growth markets in Asia and Africa has a stabilizing effect on the business activities of German companies.

Thanks to a nexus of bilateral and multilateral trade agreements, global trade and investment continue to flow relatively smoothly, as does the exchange of talent. Yet companies must incur considerable transaction costs and expend more effort than in the past if they want to adapt to local political conditions and laws.

In such a scenario, many companies strive for a greater regionalization of their product strategies, something that is also reflected in their organizational structures.
Globalization Scenarios | WORLD WITH MULTIPLE BLOCS

Which particular opportunities and risks are inherent in this scenario?

RISKS

The choice of possible cooperation partners is greatly reduced.

Supply chains become more complex due to regional regulations. Only if the EU succeeds in opening up new markets will supplies continue to flow from other blocs. The increased importance of being supplied from the EU results in marked price rises for many companies.

In many sectors, relocating large segments of the value chain to Europe is impossible since access to intermediate products is lacking.

Raw materials are more expensive, even as they become standardized within Europe. It could become necessary to ensure backup supplies of basic materials are on hand in Europe. Data-based products are decoupled early on, which in many cases leads to duplicate development efforts to gain access to different markets. This creates uncertainty, such as whether technology developed in Europe can also be sold worldwide or whether European companies can continue to participate in foreign tenders. Greater regionalization and diverging regulations increase the need to maintain separate business sites in the various blocs. Completely separate sites are even conceivable, should excessive political tensions make such a separation seem necessary. When choosing between the blocs, many companies opt for the alternative that gives them greater planning security – a decision that in some cases could favor autocratic but more predictable China, a choice that would also signify less value creation in the EU or US. Sanctions, including financial ones, are everyday occurrences, as are capital and export controls. Sanctions on goods and commodities can be misused as political trump cards, provoking countermeasures that could spiral downward into economic isolationism. International cooperation with universities becomes increasingly difficult, since research and educational systems also begin to isolate themselves. Only large multinational corporations have the necessary resources to purchase access.

OPPORTUNITIES

Companies also see opportunities in this scenario, above all in Important Projects of Collective European Interest (IPCEI), since they promote the creation of valuable networks. Successful collaborations on the EU level strengthen the bloc’s independence and resilience. GAIA-X, the data infrastructure project developing cloud technology for Europe, or a new industrial policy for the EU could open up a space for other initiatives to serve as models for the rest of the world.

A major challenge for all companies is the implementation of the European Green Deal, which is likely in this scenario. The Green Deal could become one of Europe’s trademark achievements, above all if it is linked to other sustainability goals. Germany in particular is currently seen as a green nation, since numerous innovations in the environmental sector were developed and are only available there.

An issue of great concern for companies is the future of research and development (R&D). In this scenario, many ask themselves whether they should relocate their research and development to other global regions or even set up a separate research unit at each business site. However, Europe could remain highly attractive as an investment location for local companies, if it were certain that technology developed in the EU could be sold worldwide. The resulting deepening of the European single market would further strengthen the EU’s innovative power and give German firms
in particular more leeway to promote Europe as a viable site for R&D.

This innovative power, coupled with high standards for protecting intellectual property in Europe, could be used as a bargaining chip with other blocs to call for similarly high standards there.
In light of Europe’s weakened state, the US and China are the world’s sole superpowers and thus shape global developments. Each bloc views the other as an adversary. American democracy is in crisis, as is China’s one-party dictatorship. Driven by escalating concerns about domestic stability, the rivals develop an increasingly strident “My country first” mentality – and the effects are felt around the globe. Democracies come under pressure from internal conflicts, unstable governments, populism, nationalism and other extremist movements.
International politics is characterized by clearly demarcated camps of friends and foes. Each superpower uses any available means to draw third states closer, for example to position them as representatives of its interests vis-à-vis its rival. It can no longer be assumed that multilateral structures will produce universally useful solutions, such as for climate change, migration or the dismantling of tax havens. This reduces the willingness of member states to participate in supranational institutions while hastening the global order’s dramatic loss of relevance. The G20, UN, WTO, IMF and World Bank all become incapable of taking effective action. The multilateral structures that have been built up over decades are in danger of collapsing altogether. Even the EU is at risk of disintegrating. Coming to agreement becomes more onerous because member states value loyalty to the superpowers over European unity. Taking Brexit as their cue, other countries leave the European alliance.

The Chinese and American economies have undergone a chaotic and now largely complete process of decoupling. Trade regions are fragmented, global trade conflicts are becoming more intense. The WTO has become completely ineffective. Countries everywhere struggle to negotiate bilateral or regional free trade agreements, which are difficult to finalize and ratify.

China and the US, which continue to dominate the world economy, invest massive sums in defense. One area that receives particular attention is cyberwarfare. The targets are each opponent’s critical infrastructure and its military and civilian computer systems. One side effect of China’s strict censorship is that it helps thwart attacks by the US. NATO becomes less relevant, since the transatlantic partnership is defunct. The EU is forced to recognize the military supremacy of China and the US and accept their military bases in and around Europe. The EU’s weakened position provides Russia with more leeway to increase its military presence in Eastern Europe. China works to expand its Belt and Road Initiative and its Shanghai Cooperation Organisation, founded in 2001, turning them into economic and military alliances. The US attempts to counterbalance this through greater military integration of traditional partner states in East and South East Asia. China vehemently pursues its strategy of “civil–military fusion” designed to link economic and military advances. It also redoubles its use of nationalistic rhetoric to maintain the motivation of private businesses in light of forced technology transfers at home.
China and the US pursue an aggressive “My country first” policy in all areas of the economy. Their industrial and innovation policies are driven by security concerns which lead them, for example, to introduce export controls and blacklists and to ban investments by foreign firms. China’s state capitalism centers the country’s development strategy on the country’s state-owned enterprises (SOEs). The private sector is increasingly forced into the role of subcontractor and incubator. Regulators try to nurture powerful Chinese champions through industrial policy initiatives like Made in China 2025 and state-led mergers. In contrast, the US deploys an aggressive industrial policy to strengthen its private businesses so it can benefit politically from their role as ambassadors and bridge-builders in other global regions. In this scenario, meanwhile, the EU does not succeed in pursuing a coherent industrial policy.

The EU’s economy is not capable of producing European champions. European countries must rely on the US and China to build critical infrastructure and are thus complexly dependent on the superpowers instead. Caught up in this meshwork of relationships, European companies are even forced to share their achievements with China or the US as part of unequal collaborations. The US maintains its leading role over China in this constellation, for example in the development of semiconductors. Its greater proximity to European attitudes affords it easier access to European innovations, which improves its position vis-à-vis its rival.

The US and China spar over who will set the world’s norms and standards. Since the globe lacks uniform specifications, different markets and spheres of influence develop their own product requirements. The EU loses its once leading role as standard maker and increasingly becomes a standard taker. Accepting standards from third countries also becomes more challenging. Standardization ends up being a tool that the US and China use to exert political influence in other parts of the world.

The US and China are engaged in constant conflict over raw materials from third countries. Some countries are able to exploit the Big Two’s urgent need for resources to transform themselves into new strategic players. The permanent tug-of-war over raw materials obscures ecological concerns. For example, efforts to find and drill for oil above the Arctic Circle take place at breakneck speed in order to prevent anyone else from getting there first. Even third countries see securing new sources of raw materials as an opportunity to expand their own sphere of influence, and they join the fray as a result. When it comes to their own supply of raw materials, European nations find themselves dependent on the US and China through myriad complex ties.
A global struggle ensues to set narratives and interpret political events. Due to the diminished importance of traditional news outlets and insufficient control of social media, public opinion is profoundly shaped by propaganda and fake news. China floods the world with subtle propaganda using digital means and diplomatic channels. In some cases, this involves paid groups who, as influencers supporting the Chinese regime, promote public discourse and social tensions in the US. In other countries, Beijing’s propaganda is meant to call forth a new wave of anti-Americanism while articulating China’s good will. For its part, China ensconces itself in its own Internet hemisphere, using censorship to shield itself from international news reports and narratives from the US.

Large-scale international research partnerships rarely take place any more. Due to limited budgets, European countries can now promote research in only a few areas. Europe’s best and brightest can be more readily persuaded to move to the US or China given their lack of prospects at home. The gap widens between the quality of research done in Europe and in the two rival nations. The number of collaborations between universities and companies declines. Joint research projects take place more and more on the national level. Even international student exchanges lose momentum, reducing the pool of talent available to businesses. Universities produce fewer globally oriented graduates for the labor market. The diminished exchange results in more regional visions of the future which, over the long term, evince fewer symmetries and slow global dynamics. Standardized systems and real-world developments drift so far apart that compatibility becomes less and less feasible.

Climate protection vanishes from the international political agenda. The EU does not succeed in realizing its climate protection goals; the New Green Deal fails. China tries to use climate protection to score points politically, although in reality it only takes adaptive measures, such as securing its own food supply by purchasing land in third countries.
**IMPACTS**

**What does this mean for the German economy?**

The rivalry between the US and China shapes the World in Permanent Crisis scenario through prolonged conflicts and instability – and the negative impacts are felt around the world. Given the myriad tensions, the EU, like other global regions, cannot assert itself sufficiently to develop alternative, multilateral solutions. Only in isolated cases do states manage to make a niche for themselves in key areas – as suppliers of raw materials, for example – deriving at least an economic advantage from their privileged position. Conversely, the EU is so weakened that it cannot offer its businesses any protection.

The ongoing crisis is the least desirable scenario for virtually all companies. The worsening conflicts lead to reduced economic output on a global scale. Even though the burdens vary significantly depending on sector, size or many other factors, almost all businesses are confronted with new challenges that overwhelm some of them, threatening their very existence. They must contend with shrinking markets and struggle to secure supplies in the fragmented global market. Not everyone is successful in making the adjustments needed to continue turning a profit. Investments are put on hold out of an abundance of caution. Few companies are able to build on their previous successes by defending their positions as leading innovators under the changing conditions.

**What role does the European market play?**

The EU remains an attractive market for the time being due to its size and purchasing power. Yet the political tensions within the bloc – which increase exponentially in light of attempts by the US and China to court potential allies – take their toll. As the EU fragments, it becomes clear that many individual states are too small to generate profits there, especially if competing standards must be met. This reduces the willingness of firms from Europe, as well as from third countries, to invest in the EU. In the World in Permanent Crisis scenario, some businesses bow to fate and partially decouple their operations from Europe. The result is a decline in economic output which leads to reduced purchasing power in Europe. This has a negative impact on consumption and sales, and curbs the business sector’s innovative power. The European market shrinks and becomes less relevant.

Securing supplies from other global regions becomes increasingly complicated and costly due to sanctions, blacklisting and punitive tariffs. Although parts and raw materials can be found in Europe, they too are more expensive. The growing number of European companies that are less concerned about costs than about access to the best minds and the best “ecosystem” face a long period of hardship, as many research projects decamp to other parts of the world and, with them, the best talent.

As the EU single market threatens to disintegrate, transaction costs rise steadily. The outflow of know-how and innovations coupled with higher production costs make European products less competitive. In addition, high punitive tariffs await in the markets companies hope to access. Sales decline and economic output falls even further.

**How do German companies view global markets?**

The two major players set the rules in this scenario, and German companies must find a place for themselves on site in the different regions. Despite adverse circumstances, such as tariffs and export controls, they attempt to remain...
present in all markets, developing new strategies to that end, for example to meet demand in South East Asia from China. Regionalization results in sizeable revenue losses and thus a strategic focus on fewer regions. Some companies will have to decide if they want to do business with the US or with China. Cross-border trade declines, regional self-sufficiency gains in importance. Separate production sites and research and development units must be set up for different markets. Given the higher development costs, technology advances are only possible for most companies if all major markets can be served. Forgoing key submarkets is only feasible for companies willing to pay a high price. Producing locally becomes more important. Location drives production which must adhere inefficiently to regional standards. Thus, many companies consider relocating their headquarters to those markets which generate the lion’s share of their revenue. Such a relocation poses enormous challenges for small and midsized enterprises, many of which simply capitulate as a result. The economic sector plays a key role when businesses must decide between localizing production in Europe or returning there, on the one hand, or putting more resources into foreign sites, on the other. Possible blacklisting by the US or China hangs like a sword over these strategic deliberations. A possible relocation to Europe is therefore accompanied by careful cost calculations. Given the major challenges, smaller organizations consolidate into larger units so they can use their expanded networks and know-how to act effectively and jointly in the major blocs. Investments can be jointly financed, thus spreading the risks among multiple parties. Bigger units, moreover, offer greater political and legal cover.

Which particular opportunities and risks are inherent in this scenario?

RISKS

In the World in Permanent Crisis scenario, companies are very prudent when making decisions. Without effective supranational institutions, trade disputes and armed conflicts become much more likely in many parts of the world. Uncertainty and instability force businesses to disengage and wait. Companies face the constant threat of getting caught between the two fronts and being hit with sanctions imposed by one side or the other. Reliable planning cycles are virtually impossible.

The worries in this scenario begin right on Europe’s doorstep. If the EU single market disintegrates, entire industries become vulnerable. Rising prices, fragmentation, dwindling markets and diverging standards start suffocating many companies, smaller ones in particular. Many midsized enterprises could choose to leave Europe, putting a great number of jobs and considerable know-how at risk. Europe’s need for technology would decline, potentially spurring the remaining businesses to make equally painful decisions about where to do business. Additionally, dependence on the major technology suppliers would increase.

Europe’s internal and external disintegration adds fuel to the fires stoked by nationalists. Greater protectionism reduces the size of the European single market as a sales market for German companies. It becomes virtually impossible to realize major projects without the European alliance, since their economic viability cannot be guaranteed.

With the shift of production and sales to other global regions, companies there find themselves confronted with a host of new problems. Anyone who decides to relocate to China must worry
As traditionally adept networkers, German companies can react quickly to new challenges. In particular, those companies are successful that offer products less subject to trade barriers. They have good contacts and benefit from a global supplier network and from the ability to warehouse in almost all the relevant markets.

The fragmentation of the global market allows some companies to sell their technology multiple times. Since their specialized solutions are unique, they do not face norms in different markets that increase development costs. German firms create facts on the ground and set standards.

Capacity bottlenecks, which can arise at any moment in many markets due to political tensions, create new business opportunities. German companies step in when other players require assistance and outsource production processes at short notice. New opportunities are also available to suppliers of products and services used to overcome disruptions and crises.

OPPORTUNITIES

The “Made in Germany” brand remains a reliable factor even in the World in Permanent Crisis scenario. The quality of their products and their world-leading know-how in developing numerous industrial components provide German companies with an opportunity to assert themselves vis-à-vis the rival superpowers. Germany’s Mittelstand often produces specialized solutions that make it indispensable to the US and Chinese economies.
Globalization is not what it used to be; the world is becoming more regional. Nevertheless, the US, China and Europe compete to reform global governance.

**DESCRIPTION**

In this scenario, much is reminiscent of the global order in the first decade and a half of the 21st century, even if the international balance of power and economic weightings have fundamentally shifted.

The democracies in Europe and the US coexist with China, autocratically led by the Communist Party, in a mild, non-aggressive systemic conflict. All actors make an effort to cooperate and to find solutions on a multilateral level. Yet their negotiations, in terms of both objectives and results, are less ambitious or all-encompassing than they once were. Many governments have difficulty gaining political support in their own country for the agreements concluded through multilateral channels.
Multilateral institutions (UN, WTO, etc.) are largely reformed in keeping with the wishes of China and the US, thereby losing their former influence and ability to shape developments. The reform of multilateral organizations thus itself becomes part of the US-China power struggle. This is where the superpowers design the global model that they intend to use to cooperate in the future.

The EU is given extensive powers by its member states so that it will be taken seriously as a global player. Alliances between individual actors on the world stage are formed on a case-by-case basis; there is no guarantee of set partnerships.

Since multilateral institutions such as the WTO have been weakened, the global economy is also less open than it once was. World trade is characterized by many regional free trade agreements and polylateral arrangements. Global supply chains are again being organized more regionally. It is generally accepted that states have a significant influence, since the post-reform WTO no longer offers an overall regulatory framework. At the same time, however, the WTO can intervene more strongly in some areas than it could at the beginning of the 21st century. Yet it is no longer realistic to expect the global economic order to develop into a comprehensive rules-based system.

There is no immediate threat of a direct military confrontation between the US and China. Nevertheless, the global security situation remains precarious, since potential flashpoints, such as Taiwan or the South China Sea, continue to cause tension. More complex military alliances are needed as a result. All countries thus invest extensively in security even in the Reformed Multilateralism scenario, hoping this will allow them to respond to international challenges. The imbalance in the global security architecture persists, favoring the Western alliance.

China steadily continues its efforts to catch up in the area of technology so it can become the global market leader in key industries. Beijing pursues its objectives through a strongly state-capitalistic economic policy. Targeted industrial policy measures become preferred instruments that set a framework while achieving regulatory aims. In light of the distortions in the Chinese market, Europe seeks responses that that do not jeopardize relations in general and allow the EU to continue its economic engagement with China. The US, in contrast, relies heavily on export controls when trading with China, arguing they are necessary for national security.
Europe defines technical sovereignty in the area of critical infrastructures and key technologies as an essential challenge and invests extensively in its own innovations as a result. Attempts are made on the international level to develop common rules for key technologies. New multilateral organizations are one option, through which negotiations can be held on the dividing lines between critical and non-critical technologies. Yet fierce global competition and widespread uncertainty make it more difficult to get all major players onboard when international cooperation is needed.

International trade is fiercely contested, as is the sourcing of raw materials. China tries to dominate Asia and Oceania in order to secure its own supplies. Not becoming dependent on China is the Western bloc’s top strategic priority. Rare earth metals that are predominantly found in China are an important trump card for Beijing. International agreements and trade policy concessions made to the Chinese are meant to ensure access for the rest of the world, even in times of crisis.

All major economic powers try to develop and set global standards. Those who manage to do so increase their political influence. Due to strong competition, uniform global norms are established in only a few areas. Companies must adapt to competing standards in different regions of the world. The EU sets standards in some technology niches such as data protection.

These is also an intensive competition over narratives, which the participants use in an attempt to become the authoritative interpreter assigning meaning to global developments. At the same time, no one player is successful in dominating the media, in part because there are few waves of outrage in an age of generally peaceful multilateralism. Although China attempts to win over public opinion outside its borders using propaganda, it encounters considerable resistance. China has lost considerable credibility on the international level since the coronavirus pandemic.

A range of global educational partnerships continues to exist. Bilateral agreements regulate the exchange of school and university students, as well as researchers. Countries and businesses alike benefit from the general willingness to collaborate. There is an international tug-of-war over the best and brightest. Countries must develop methods for attracting sufficient talent capable of overcoming future administrative challenges. Yet many gifted individuals prefer to deploy their skills on behalf of their own start-ups, which gives additional impetus to the development of new technologies.
Global cooperation focuses on climate change. All major powers work together to develop market-based tools that can reduce the impact of climate change, such as carbon pricing. Those who are technologically competitive in this area have a considerable advantage over other players. The EU successfully establishes itself as a pioneer here. Other countries use its taxonomy for classifying investments by degree of sustainability as a template for promoting their own sustainable business practices.

What does this mean for the German economy?

Reformed Multilateralism is the preferred scenario from the perspective of the German economy. The willingness to cooperate on all sides minimizes the risks of new trade conflicts and other crises. This gives companies a stable foundation for strategic planning and investments. Nevertheless, challenges remain. Regulations on the American market, on the one hand, and aggressive Chinese economic policies, on the other, delineate a line of conflict along which businesses must operate and sometimes react flexibly. Diverging standards in the world’s various regions add to the cost of research and development.

What role does the European market play?

Large parts of German industry depend on having a healthy European market at their disposal as the basis for their success. Accordingly, policymakers are expected to strengthen the European single market, so that businesses can continue to operate smoothly should there be a worsening of multilateral relations. There is no need for companies to withdraw completely to their home market, since there is growth potential to be found in many parts of the world; to avoid a rude awakening in the long term, however, businesses still need a strong connection to Germany and Europe, even in times of multilateral cooperation. Otherwise, they could become too dependent on China or the US, which could take a heavy toll should there be a sudden crisis. At the same time, German companies cannot take their success on the EU market for granted, since US and Chinese players are becoming more competitive there, too.
How do German companies view global markets?

Many companies take advantage of the general commitment to multilateralism to expand their international activities and networks. Other Asian markets grow more attractive since they offer, in addition to higher sales, the possibility of reducing dependence on the Chinese market. Many firms view China’s state capitalism as too unpredictable and gratefully accept the opportunity to diversify. Nevertheless, China remains a crucial market that companies are just as unwilling to do without as they are the US market.

Which particular opportunities and risks are inherent in this scenario?

OPPORTUNITIES

Multilateralism’s opportunities can especially be found behind the many doors that open for German companies in this scenario. Partnerships can be more easily implemented around the world, since there is less political distrust of other players. This provides European businesses with greater leeway, especially since the multilateral environment promotes flexibility and creates room for growth. The new dynamic also gives companies a new self-confidence when doing business on the US and Chinese markets. In cooperation with third parties, the EU can develop standards and marshal arguments for applying these standards globally as well.

RISKS

Reformed Multilateralism is not set in stone, which is why underlying conflicts or new geopolitical developments can unsettle the equilibrium of this preferred order. Yet even with multilateralism flourishing, China’s strong state-capitalistic economic policies remain a challenge to which Europe must find a response if it wants to avoid becoming more dependent. This is especially true, since such dependence could be detrimental to the competitiveness of European companies not only in China itself, but also in other parts of the world. Should its member states lack unity, the EU’s influence in international organizations could decline. Given the constantly growing pressure from international competitors, this loss of influence would deprive businesses of an important political tailwind.
America democracy and Chinese autocracy co-exist largely in peace. Despite all their systemic differences, the superpowers recognize the potential offered by working closely together so they can, for the most part, shape the world as they like. Therefore, each makes political concessions to its rival, a move both portray at home as part of a larger success strategy. It is rare for either side to provoke the other, since neither wants to jeopardize their economic cooperation. The EU makes do following in the wake of both major powers, becoming the world’s undisputed third power, although it is less relevant as an independent political player.
At the behest of the US and China, multilateral institutions are reformed so that they primarily serve the interests of the two superpowers. Both rivals use the organizations for their own purposes, while preventing them from influencing their own activities to an undue extent. The supranational institutions thus engender resentment in the rest of the world, and numerous bilateral partnerships between third states are formed as a result. The partnerships allow countries to escape the Big Two’s immediate sphere of influence.

As a G2 with opposing ideologies, China and the US dominate the world’s geopolitical framework. Their joint influence enables them to recognize hotspots around the globe early on and to defuse them if their common economic interests are at stake. Europe only takes on the role of stabilizing power when the G2 sees no reason to get involved.

The US joins the China-led Regional Comprehensive Economic Partnership (RCEP), which largely quells the trade war between the G2 and has a positive effect on global trade. The WTO sets the world’s trade policy framework, which, however, China and the US shape to their own advantage, leaving other players few possibilities for opting out. This is especially true since global supply chains generally function smoothly, something that benefits all developed countries, particularly the EU. The US also concludes a free trade agreement with Europe to serve as a counterweight to the EU-China investment agreement. Economic interests push the focus on respecting human and civil rights into the background.

The close economic cooperation between China and the US creates greater dependencies. No one is willing to jeopardize this construct to any meaningful extent. The G2 countries agree to coexist largely in peace, which significantly improves the global security situation. Although smaller regional conflicts in the Middle East and Africa cannot be prevented by the Americans and Chinese, they do not endanger the overall security architecture. Even Russia and North Korea are no longer direct threats to the West, since China exerts a positive influence on both nuclear powers. Expenditures for defense and security remain high, but do not rise. Global military alliances are rarely needed, since the two superpowers step in when conflicts loom.

Global economic competition is shaped by the G2’s cooperative efforts. In many fields, however, Americans and Europeans compete fiercely with the Chinese, with everyone racing to gain the lead in key technologies. Yet everyone is willing to make concessions so as not to destabilize the overall order. China gives foreign companies an equal chance to participate in its public tenders. The US financial industry is granted access to the Chinese market. In return, Chinese technology players can again increase their operations in the US if they meet certain conditions. Export controls are kept to a minimum. Companies from the EU benefit from a level playing field in the People’s Republic.
China succeeds in catching up in key technologies, since the Americans permit exports of semiconductor technology to the People’s Republic. In return, controls on US tech firms in China are relaxed as are framework conditions, allowing the companies to gain market share.

China and the US agree on basic rules for key technologies, which benefits European companies in particular since they must no longer duplicate their development activities. With that, Europe loses its technological sovereignty because the G2 calls the shots internationally.

Multilateral organizations create clear dividing lines between critical and non-critical technologies that are recognized and respected by all stakeholders. There is more trust among all players when it comes to planning and implementing international partnerships.

Trade in raw materials remains fiercely contested. Yet growing trust between the superpowers means that the US and Europe view being dependent on Chinese supplies with less suspicion. Moreover, joint G2 initiatives guarantee access to oil and natural gas for all players.

As the largest economic powers, the Chinese and Americans set global standards, which are largely designed to be uniform, to the extent that national security is not directly threatened.

For Europe, this means having to curb its ambitions to be the standard maker in parts of the world, since the G2’s market power and political influence are too great. Companies benefit from the mostly uniform standards.

Cooperation on the economic level leads to more domestic stability in the G2 countries. Flourishing economies generate more satisfaction within society, and the need to view others as the enemy diminishes as a result. This also reduces the urgency states feel to drive the narrative for certain events. In many respects, China and the US pull together and can market their policies at home as successful.
China’s diplomats tone down their rhetoric, and the People’s Republic is no longer branded in the US as the root of all evil. The prospect of future growth provides the rivals with greater political cover and, consequently, many efforts to strengthen human and civil rights as a universal value system come to naught. Powerful interest groups in the democratic states assert that greater authoritarianism is needed to ensure economic growth.

Global educational partnerships and exchanges thrive. Borders are wide open to school and university students and to academics who want to continue their learning and find inspiration abroad. All stakeholders see unrestricted educational pathways as a chance to further develop the global economy. Despite this general willingness to cooperate, there is fierce competition for the most talented individuals.

Climate change is the focus of global collaborative efforts in the G2 scenario as well. All the major powers work together to develop market-based tools for slowing climate change, such as carbon pricing. Those who are technologically competitive in this area have a sizeable advantage over other players. The EU is able to establish itself as a pioneer. Its technologies and strategies prove fruitful in China and the US, among other markets.
IMPACTS

What does this mean for the German economy?

In the G2 scenario, it is easier for companies to see where international relations are headed. Since there is no threat of ongoing crises resulting from geopolitical discord, the framework conditions for long-term investments are stable. The US-China alliance spares German industry the dilemma of having to decide in favor of one market over the other. There is also no need to develop two production lines that operate independently of each other making goods for China and the US.

However, the G2 states increase their market power in the EU due to their close cooperation. The two superpowers not only compete directly with European companies, they also set more and more industrial standards. Europe loses its technological sovereignty as a result. Although businesses benefit from uniform standards, their competitiveness and their ability to assert themselves suffer.

What role does the European market play?

In this scenario, European companies are very active globally. At the same time, the European market plays a key role in their success – especially since the G2 uses its combined power to dominate in other regions of the world. This makes it all the more important for companies to leverage their home-field advantage in Europe so they can lay a stable foundation for their business operations. To that end, Europe must harmonize its internal market to prevent European companies from experiencing competitive losses and reduced sales on their own doorstep. Nevertheless, companies face fierce competition from American and Chinese players, who are increasingly active on the European market.

How do German companies view global markets?

The stability of international relations gives companies more leeway in their operations in many regions of the world. Since the conflict between the US and China does not play a significant role in this scenario, companies are in a position to link their activities in both markets. Their homogenous planning, production and sales allow them to integrate additional markets and to exploit economies of scale more fully. The tendency towards regionalization diminishes markedly.

The Chinese market becomes more attractive because, as part of its close cooperation with the Americans, Beijing creates a level playing field for foreign investors and vendors.

Yet the harmonious relations between the US and China also mean that European companies must generally play by the superpowers’ rules. Those who make the rules do so to build on their own strengths. This greatly adds to the pressures faced by European firms, which find themselves at a competitive disadvantage.

Since the WTO is dominated by the two major powers, German and European companies often find they have been edged out in decisions made by the international trade body. They must adjust to a world in which the US and China play the leading roles. In this environment, the EU finds it harder to assert itself politically. Thus, European companies must frequently go it alone when they position themselves in foreign markets.
Which particular opportunities and risks are inherent in this scenario?

**RISKS**

The dominant position of the US and China means that Europe becomes much less relevant as a political and technological player. European firms must acquiesce to outside pressure. The G2 nations use Europe as the main playing field for their industrial competition, which they do not want to engage in openly in either of their home markets. As a result, European companies experience an extreme level of competition in Europe from both China and the US and are threatened with being crushed between the two as the superpowers pursue their own interests.

The lack of European sovereignty and the loss of relevance when it comes to standardized systems soon put the EU in a dependent position, with far-reaching consequences. Production sites are increasingly relocated to third states. Investment in research and development flows mainly to China and the US, a trend that acts as a powerful magnet for talented individuals on the global job market, making it exponentially harder for European companies to recruit personnel.

**OPPORTUNITIES**

European companies use the predictability, reliability and stability of international relations to concentrate on their core competencies and demonstrate their competitiveness. The G2 scenario markedly reduces the risk of a conflict with global implications between the US and China, and businesses become much more optimistic as a result. They plan for the long term and are ready to invest. In terms of research, companies are willing to engage in new partnerships, paving the way for many technological and operational innovations.

Many regulations that previously consumed valuable resources are now obsolete. The freed-up energies flow into innovative projects and companies’ core business activities.

The Chinese market also promises to boost growth further since foreign companies face less discrimination there.
This section summarizes the conclusions according to several questions of key importance:

**HOW WELL HAVE GERMAN COMPANIES’ BUSINESS MODELS PREPARED THEM FOR POTENTIAL CHANGES?**

All companies are aware that geopolitical shifts will change the foundation on which they do business. The way in which companies prepare for this differs, however: Some systematically analyze geopolitical and global economic developments, sometimes in the form of detailed future scenarios. At a number of major German companies, such analyses are carried out in a structured fashion by specialized organizational units. Yet even small and medium-sized enterprises (SMEs) reflect on their future at length in light of global changes. Some SMEs reported that, in the past, observing global conditions and assessing their future development has been a valuable tool for aligning strategic decision-making with political change. Some family-run companies in particular have generations of experience dealing with global political developments, such as during the Cold War.

Depending on the approach, the future scenarios used by the interviewed companies differ from the potential events depicted in the present publication. For the most part, however, the global trends they take into account are similar.

The crucial question, however, is whether it is possible for the companies – given their specific business models, their financial resources and their networks – to set the course in such a way that they can actually overcome new challenges.
THE CHALLENGE OF A PERMANENT CRISIS

The Permanent Crisis scenario, for example, could prove particularly difficult for some companies in the metalworking or primary industries. Such business models largely have a regional orientation. In today’s world shaped by a Cold Peace, these companies benefit from being proficient at complying with Europe’s environmental and social regulations, something that might also be true in a world with multiple blocs. This advantage could disappear, however, in the unregulated competition of the Permanent Crisis scenario.

A permanent crisis would also mean fewer competitive advantages for traditional Mittelstand companies in the capital goods industry. These highly specialized firms benefit to a lesser extent from the advantages offered by mass production than manufacturers of mass-produced goods, such as those in the automotive industry. They are successful, moreover, since they supply the entire global market and are themselves supplied from sources located around the world. This results in cost advantages in their foreign production, on the one hand, and makes economies of scale possible due to larger production volumes, on the other. In the Permanent Crisis scenario, both advantages would be jeopardized. These sectors have a somewhat brighter outlook in the World with Multiple Blocs scenario. For many Mittelstand businesses, the prospect of a strong Europe gives rise to the hope of comprehensive trade agreements with the other blocs. These agreements would guarantee a market large enough for the business models used by the companies discussed above. Moreover, this scenario offers the hope of a strong and capable European Union providing an effective defense against unfair competition by third states.

SUPPLY CHAINS AS A KEY FACTOR ENSURING FLEXIBILITY

Many companies are prepared for the fact that under certain conditions they will have to shift at least part of their business operations from Germany to other world regions. However, the business models used in some industries require major investments in production facilities, which must then operate for decades to be profitable. This applies, for example, to primary industries and the chemicals sector. Yet making major investments abroad is especially risky if sales can only take place locally due to production processes or market conditions. In a world in permanent crisis, one necessary consequence could be spinning such production units off from the parent company in Germany in order to avoid a balance sheet write-off. As important as tradition and personal ties to the company’s original location might be, they can only play a subordinate role when such existential threats loom. In any event, decisions of where to do business now depend only to a limited extent on the firm’s history, market and integration into local business clusters. A factor that is becoming more important for such decisions instead is where a company’s shareholders are from. Many enterprises, such as original equipment manufacturers (OEMs) and suppliers in the automotive industry, are already at work making their complex and globally networked supply chains more resilient in the face of unfavorable future scenarios. Even today, they often have to supply, develop and produce for separate markets on multiple tracks. A permanent crisis could drastically increase the need for such steps, as could the formation of blocs. Control electronics is a prime example. Regulations are being tightened in many countries restricting where such sensitive components may come from. Companies wanting to supply the US would be well advised to produce in Mexico or Canada in order to avoid problems stemming from economic policy constraints. Such decisions, however, could require companies to loosen ties with the location where they have traditionally been based.
A permanent crisis could result in corporate units being spun off in the automotive industry as well. Firms in the electronics, IT and software industries would also find themselves having to make fundamental decisions about the path they will take, since the Chinese market has long been driving growth in these sectors. Should it come to the formation of contentious blocs, some companies would have to seriously consider exiting the US market. In a world in permanent crisis, some firms would even have to consider leaving their home market in Europe. This also applies to high-tech Mittelstand enterprises that have done business in Germany for generations, since they, too, have been active on the world market for decades. And even though in many cases such a decoupling from a company’s home base would only be the absolute last resort, many firms could well have no other choice if they want to save their business model. Companies threatened with having to take such a step are closely monitoring the pace of global developments so they can respond quickly should the worst come to pass.

Other sectors have already made major adjustments or are implementing the necessary measures in the short to medium term. We expect that they will be relatively well prepared for the challenges described in even the least favorable future scenarios. It is impossible to make one-size-fits-all predictions, however. The framework conditions for specific industries and individual product portfolios are simply too varied.

**RESEARCH & DEVELOPMENT DEPEND LESS AND LESS ON LOCATION**

German companies that are quality and innovation leaders are generally confident that they can continue operating on a sound economic footing, even if a permanent crisis occurs or blocs form. These include pharmaceutical manufacturers with German roots that are internationally oriented and highly innovative. This is particularly true for market segments in which production costs of supplier products only account for a small share of total costs. Even transport costs play a minor role here relative to the value of the products in question. The key factor is the very high expenditures for research, which are incurred even before production begins. This business area is extremely international, globally networked thanks to digitalization and, as a result, generally no longer dependent on location. Moreover, this sector is only affected by trade barriers to a limited extent, since many countries have a keen interest in ensuring access to medications and therefore promote both imports and production within their own borders – largely regardless of political developments. One major challenge for players in such segments is protecting intellectual property, which would be at considerable risk of theft in unfavorable future scenarios due to a lack of mechanisms for imposing sanctions.

There are also companies across all sectors that have specialized in stepping in as suppliers exactly where short-term deliveries are needed. They are seen as high-price providers, but are usually very flexible. These companies also tend to view an escalation of the geopolitical situation optimistically, since they can close the short-term gaps that appear in the market.

To prepare to the greatest extent possible for future uncertainties in the global value creation process, companies in various sectors can check to see if worldwide supplier networks or globally distributed warehousing might be an option. Such resources minimize the risk of production downtimes. A few businesses could even benefit from the appearance of multiple blocs or a permanent crisis, such as certain players in the logistics industry, providers of security technology, or companies that specialize in overcoming the challenges posed by competing technical standards.
HOW IMPORTANT IS EUROPE FOR THE GERMAN ECONOMY?

The EU can make a crucial contribution to ensuring European companies remain competitive in the future, thus also contributing to European prosperity. At the same time, the EU has many weaknesses that impede the achievement of this goal.

The companies interviewed agree: Europe's biggest trump card is its single market, the world's largest economic area. Yet this attribute also poses numerous challenges. Many national borders, languages and cultures must be overcome and brought together into a more or less concordant community of interests. Any form of fragmentation puts a brake on the alliance, and preventing this is challenge enough. Moreover, third states make this process of homogenization even more difficult, sometimes blatantly so. For example, China uses formats like 17+1 – a forum it initiated for dialogue and exchange with Eastern European states, including numerous EU countries – to divide and weaken Europe.

What's more, the EU offers third states numerous points of attack. Its unanimity principle helps foreign powers to paralyze Europe through its decision-making processes. To prevent decisions from being made, a country must convince only one of the 27 member states to side with it and its interests. Yet even without outside influence, Europe has a hard time maintaining unity and struggles to find solutions to geopolitical, social and technological issues. Other global regions, above all Asia, are more dynamic.

EUROPE COULD END UP JUNIOR PARTNER

As the world's largest economic area, Europe's goal must be to compete with the US and China as an equal. This is not yet the case, since the EU has not succeeded in increasing its global relevance. This will only be possible if Europe develops and provides solutions that other countries do not, thereby creating positive dependencies. Otherwise, the EU could well be reduced to the role of technology enabler in foreign markets, only to play a leading role there for a limited time before being displaced by companies from China or the US. Photovoltaics is one example of how quickly companies from the EU can lose their relevance. If Europe wants to continue participating in markets and value chains of certain future technologies (e.g. quartz glass for the semiconductor industry), it must be capable of formulating strategic and geopolitical goals. The companies interviewed therefore agree that Europe must initiate and implement more projects that are meaningful and unifying.

GDPR – ONE EXAMPLE OF A SUCCESSFUL EUROPEAN STANDARD

The companies generally view the General Data Protection Regulation (GDPR) positively. Despite initial problems during implementation, the regulation has established itself as a global leader in the area of data protection. The companies thus benefit, because customers from non-EU countries are willing to trust European firms as a result of the regulatory framework. The GDPR is an example of a so-called Important Project of Common European Interest (IPCEI) that the companies interviewed regard favorably.

The GDPR has become a sort of trademark for the EU and thus a model for other projects. The German companies see great potential in rigorously implementing the European Green Deal, i.e. the goal of having zero emissions by 2050. Here, the companies discern a major gain in the EU's image as an environmentally aware player that recognizes the zeitgeist and sets the standards for others in the world. The growing urgency to reduce global emissions is turning environmental protection into the driver of economic developments in China, the US and the rest of the world. Europe's pioneering role
offers excellent economic prospects in terms of the international competition to set standards and develop future technologies.

China is already looking to the EU with curiosity in order to become familiar with Europe’s taxonomy tool and its effects. The taxonomy’s role as an instrument for classifying investments by their sustainability is a key aspect of the Green Deal. In practice, this means that Europe’s steel industry, for example, could be the first worldwide to deliver “green” steel that is produced much more sustainably than traditional steel. The EU must work here to defend its head start. This will only be possible if it continues along its chosen path and if the sales market is created through the appropriate incentives. Additionally, the Green Deal must be linked to other sustainability goals, such as social justice and good governance.

CREATING AN INDUSTRIAL BASIS IN EUROPE

In addition to the Green Deal, the most important point for the companies is the focus on future technologies. Europe must remain technologically attractive and must pave the way for research, development and value creation within the EU. That is the only way that European companies could go up against the international competition on an ongoing basis. Cutting-edge technologies “made in Europe” could substantially mitigate the fallout from isolationist tendencies around the world. After all, even if markets close themselves off, societies will retain their global focus and will continue looking to Europe if the relevant technologies are available there. A precondition for this is technological sovereignty: Projects like GAIA-X as a cloud technology for Europe coupled with a new EU industrial policy could serve as exemplary initiatives, allowing Europe to make its mark. On the technology side, however, European players cannot yet replace US firms, and technological ecosystems are emerging in China that Europe is having a harder time competing with. What’s more, some sectors do not even have production sites based in Europe.

The best case would be for Europe to create its own industrial base capable of driving research and development and preventing all technologies from having to be imported. Investment would not be the problem here. The issue instead is Europe’s lack of sales markets, which means it cannot be sure it could sell any technologies it develops worldwide. Another problem is that Europe lacks its own platforms for nurturing global champions. In some industries, the EU seems to have already lost the race against competitors from the US and China.

To maintain its industrial base, it is crucial for the EU that its companies generate key technologies within regulated competition. For that to happen, the companies’ own interests must be clearly defined as such and separated from overall European interests meant to promote the continent as a location favorable to industry. A clear differentiation is necessary to prevent undesirable developments in the EU from benefitting individual companies. Global champions are only of use to the EU if Europe also benefits as a business location.

Despite the urgency of creating its own technology base, Europe should still play to its strengths as a regulator and norm-setter. Over the long term, EU standards could be adapted worldwide once they have proven effective, as with the GDPR.

HOW DO GERMAN COMPANIES VIEW CHINA AND THE US?

The global political situation is increasingly being determined by the rivalry between the US and China. During the Trump administration, this rivalry became an open conflict for the first time in the form of a trade war. There is much to suggest that the rivalry will continue under the Biden administration. Although the superpowers are trying to maintain good relations and are well aware of the dangers that would accompany an escalation, cooperation in the
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and is forecast to remain so in coming years. Yet this sizeable potential is offset by a more difficult market environment. Lack of legal certainty, discrimination against foreign companies in the form of major restrictions on market access, forced technology transfers, unfair subsidies coupled with government support for Chinese companies – the list of disadvantages often seems discouraging. However, despite the structural challenges, many German companies view the Chinese market as a success story. Experience has shown that German firms can do business very profitably in China despite political and legal difficulties, something that can be traced back to the companies’ usefulness to the People’s Republic as suppliers of know-how and providers of jobs to many millions of Chinese, among other factors. The question – and danger – remains of whether China will continue to see them as useful over the long term. A look at the trade figures excluding services shows that China is Germany’s most important non-European trading partner.

Legal Certainty in the US, Uncertainty in China

China and the US are major markets for German companies, yet are in many respects different and complementary.

Many companies have complex ties to the US that have developed over decades. The US is a sales market, production site and research hub. Especially in the area of digitalization, the US is taking on a leading global role. Through its financial markets and the dominance of the US dollar as a reserve currency, the country influences the global economy like no other player. And while the Americans always use their political clout to promote their own economy, the country’s legal system also creates a very reliable market there for German companies. If one looks at trade in both goods and services, the US is Germany’s largest economic partner.

China has developed into a market of similar importance for many German players in recent decades. Growth is much higher than in the US and is forecast to remain so in coming years. Yet this sizeable potential is offset by a more difficult market environment. Lack of legal certainty, discrimination against foreign companies in the form of major restrictions on market access, forced technology transfers, unfair subsidies coupled with government support for Chinese companies – the list of disadvantages often seems discouraging. However, despite the structural challenges, many German companies view the Chinese market as a success story. Experience has shown that German firms can do business very profitably in China despite political and legal difficulties, something that can be traced back to the companies’ usefulness to the People’s Republic as suppliers of know-how and providers of jobs to many millions of Chinese, among other factors. The question – and danger – remains of whether China will continue to see them as useful over the long term. A look at the trade figures excluding services shows that China is Germany’s most important non-European trading partner.

Producing in China for China

Many German companies have begun to re-evaluate the role of the Chinese market. In the past, firms largely produced and invested in China for the market there. Even then, given its many advantages as a business location, the People’s Republic was seen as a promising link in global supply chains, something that has now become reality for many companies. The Chinese government demanded that foreign companies integrate Chinese sites more fully into their global operations and relocate higher-quality segments of their value chain to China – research and development, for example. Beijing used the Belt and Road Initiative as additional bait by creating a narrative in which business activities with third markets located along the “New Silk Road” would largely take place via China. Foreign firms could thus avoid creating a direct connection from their home countries to third states and use the People’s Republic as a hub for their business endeavors instead.
These days, German companies have a more critical view of their engagement in China, and the willingness to include the country in global operations has declined in recent years. There are two reasons for this: First, considerable uncertainty exists about whether products made in China, mostly of a technological nature, will be accepted in other countries. One prime example is Huawei. The debate about security risks resulting from the use of components made by the Chinese network operator has evidently led many companies to rethink their position. Second, the companies interviewed have also become more skeptical when it comes to Chinese competition. Government industrial policies such as the strategy “Made in China 2025” have given rise to concerns that state aid will be unfairly used to transform Chinese companies into competitors on all fronts much faster than would otherwise be the case.

German companies have long been accustomed to finding their position on global markets without the help of geoeconomic hard power from their home country. Now, for the first time, they face competitors from two superpower economies whose governments are using their clout to promote their own companies all around the globe.

FEAR OF OVERDEPENDENCE IS GROWING

Many German players also fear becoming overdependent on the Chinese market. The trend is therefore once more towards producing in China for China. Outside the country, however, the companies would like to establish structures that would prevent China from exerting influence on their business operations. Currently, no company is seriously planning to leave China or the US. They are looking instead for strategies that will enable them to remain active in both markets. As noted above, many companies, such as OEMs and automotive suppliers, are already at work making their complex, globally networked supply chains more resilient, including against events that could arise in unfavorable future scenarios. Some potential strategies even go so far as to consider breaking up companies into different units, one of which would be responsible for doing business with China and the other with the rest of the world. Even if these are extreme scenarios, they show how seriously the companies view the current state of affairs and the extent to which they are already planning on the situation deteriorating.

At the same time, withdrawing from even one of the three major blocs could jeopardize a company’s economic viability. The Permanent Crisis scenario – with more difficult access to foreign markets, diverging standards and possibly even more member states leaving the EU – would most certainly spell the end for many enterprises. In a fragmented world in permanent crisis, the question even arises for Germany’s major, world-leading automotive suppliers of whether they could remain globally competitive if their production sites were increasingly reduced to operating only in Europe.

WHAT CAN POLITICIANS DO TO SUPPORT GERMAN COMPANIES AS THEY MAKE THE NECESSARY ADJUSTMENTS?

The interviews did not directly address the question of what political players could do to shape the framework conditions companies will face in the future. Nevertheless, certain indications were given during the workshops about what steps the companies feel policy makers could take to prevent the worst of the scenarios from becoming reality.

DESIRE FOR A STRONGER EU

Most frequently, the companies said they want the EU to be united and capable of taking action, to be strong so that it can assert itself and the interests of the European economy on a global scale. That is
the only way, they feel, to prevent the world from sliding into permanent crisis. Many companies view the EU’s decision-making processes as too slow and cumbersome. They believe that more national sovereignty must be ceded to the EU and that efforts must be made to prevent other member states from exiting the Union.

Not only is greater unity important to the companies, so is giving European politics a more strategic orientation, something that would require a general debate on how the EU is positioned. The goal must be to make decisions more quickly and to develop more clout beyond Europe. Various policy fields were mentioned several times, even if there were different ideas on how they should be shaped. One clearly articulated desire was that the EU focus on essential policy areas.

REGULATORY CLARITY AND INDUSTRIAL POLICY GOALS

Many companies, especially those in the Mittelstand, view traditional regulatory principles, such as private property and competition, as crucial for strengthening Europe’s position in the world. They feel that the EU must become more robust in terms of its economic policy, for example by reducing debt levels and strengthening economic freedoms. They also believe that the EU’s rules should be more actively enforced through a strong European regime for promoting competition, in the area of digitalization for example.

In contrast, other companies see government-led industrial policy as an option for strengthening the EU. The wish list here includes industrial policy guidelines and goals, along with a greater commitment of government funds to support transformation processes and promote start-ups.

AMBITOUS TRADE POLICY COMMITTED TO OPENNESS AND FREE TRADE

Another area of central importance is trade policy. Most of the companies are active internationally, which means their very existence depends on open markets and free trade. Many firms see free trade agreements as crucial to their future success. Multilateral frameworks organized and controlled by an empowered WTO are especially important for both Mittelstand and DAX companies. The companies are unanimously in favor of maintaining a rules-based system of global trade. In particular, smaller enterprises that are internationally active stress the importance of having a reliable regulatory framework for their economic planning. Robust multilateralism, they say, expedites their involvement in different markets, since it makes it easier to resolve trade disputes.

EXPANDING TRANSATLANTIC TIES

Many companies hope that Europe will succeed in preserving its political leeway in light of the confrontation between the US and China, thereby maintaining its industrial standards. They view peace and security based on a strong transatlantic partnership as the basis for successful business operations. Yet they also feel only an empowered EU will be able to deepen the transatlantic partnership so that Europe can shape and benefit from it. Climate and digital policy will gain in importance, they say, and have already become essential policy fields in many industries.
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