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# Multiple disruptions<sup>1</sup>

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## Abstract

This paper explores the concept of "multiple disruptions," transformative upheavals reshaping the social, geopolitical, and technological landscapes. Drawing from historical and contemporary contexts, it examines how crises, such as ideological clashes, geopolitical instability, and rapid technological advancements, act as catalysts for either creative reinvention or destructive decline. The analysis highlights Europe's vulnerabilities, including its economic stagnation and internal divisions, juxtaposed with the United States' adaptive resilience and global leadership in digital innovation. By comparing current trends to historical precedents like the fall of Rome, the paper underscores the urgent need for flexible and strategic responses to navigate this era of profound change.

## Zusammenfassung

Dieses Papier untersucht das Konzept der "multiplen Disruptionen", transformative Umbrüche, die die sozialen, geopolitischen und technologischen Landschaften neu gestalten. Es wird analysiert, wie Krisen – wie ideologische Konflikte, geopolitische Instabilität und rasante technologische Fortschritte – als Katalysatoren für entweder kreative Erneuerung oder destruktiven Niedergang wirken. Die Untersuchung beleuchtet Europas Schwächen, einschließlich wirtschaftlicher Stagnation und interner Spaltungen, im Vergleich zur adaptiven Widerstandsfähigkeit und globalen Führungsrolle der USA im Bereich digitaler Innovation. Durch den Vergleich aktueller Trends mit historischen Präzedenzfällen wie dem Fall Roms wird der dringende Bedarf an flexiblen und strategischen Antworten zur Bewältigung dieser Ära tiefgreifender Veränderungen hervorgehoben.

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<sup>1</sup> ChatGPT 4 and MS Co-Pilot provided research assistance. Errors are attributable to the author.



In February 2022, the then German Chancellor Olaf Scholz spoke of a "turning point" triggered by the Russian attack on Ukraine. However, this turning point is increasingly turning out as multiple disruptions. The term "disruption" has its origins in the Latin "disruptio", which means "to break apart". Once a medical term, it is now often used to refer to the radical upheavals that are shaking up our world. Disruptions are often triggered by crises that arise from massive disruptions to complex systems. In a crisis, tensions can intensify to such an extent that the disruption leads to the collapse of the system. However, the crisis can also unleash forces that lead to the creation of a new system after the collapse of the old one. Joseph Schumpeter (1942) called the process in which new structures emerge from old ones through innovation "creative destruction".

After the upheavals caused by the world wars in the first half of the last century and the fall of the Soviet empire towards the end of the century, a new era of multiple disruptions has dawned. Social policy, geopolitics and digitalization are at the heart of profound transformations. Germany and Europe are ill-prepared for these multiple disruptions. Instead of new creation, the end result could be destruction alone.

### **Social policy: Kulturkampf**

*"Newspeak was the official language of Oceania and had been devised to meet the ideological needs of Ingsoc, or English Socialism... The purpose of Newspeak was not only to provide a medium of expression for the world-view and mental habits proper to the devotees of Ingsoc, but to make all other modes of thought impossible."*

*George Orwell (1949)*

The victory of the Western liberal powers over the Soviet empire in the early 1990s did not bring the "end of history" proclaimed by Francis Fukuyama, but rather unleashed forces that have become a major threat to the Western liberal social order. In France, since the 1960s, "postmodern" philosophy has prepared the ground for a post-liberal understanding of the social order. According to the French philosopher Jean-Francois Lyotard (1986), the "narratives" of modernity focused on the subject and reason as the central elements in society. However, according to Lyotard, instead of homogeneity, heterogeneity prevails and instead of a few general principles, a multitude of world views apply.

In the wake of postmodernism, social theories such as "critical race theory", "gender studies" and "postcolonial theory" initially emerged at universities. In the 2010s, this gave rise to a movement in society and politics that called itself "woke" in reference to a term coined in the USA in the 1930s for vigilance against racial



discrimination. In 2014, the "Black Lives Matter" movement took up the term and brought it into the public consciousness. There it was expanded and linked to "progressive left politics", "left identity politics" and an awareness of injustice, inequality and the oppression of minorities. The movement's propagandists attempted to use the means of "political moralism" (Hermann Lübke, 2019) to gain "cultural sovereignty" (Antonio Gramsci, 2012) over society. To do so, they used social but also established media (such as public broadcasting in Germany).

But the subjects of the would-be rulers of "culture" rebelled. They did not want to be told what to eat, how to speak, where and how to go on vacation or what kind of heating they should have in the basement. The preferential treatment of previously discriminated minorities led to renewed resentment against these groups. Barely limited immigration of people from other cultural backgrounds fed the conspiracy theory that the elites wanted to exchange the people they hated for wards they coddled.<sup>2</sup> The "anti-woke" rebels overthrew the cultural rulers - especially in the USA by twice electing Donald Trump. But rebels also entered governments in European countries such as Sweden (Jimmie Akesson of the Sweden Democrats), the Netherlands (Geert Wilders) and Italy (Giorgia Meloni).

In the US elections last year, Donald Trump received 49.9% of the vote and his opponent Kamela Harris 48.3%. Trump's party, the Republicans, won 50.6% of the seats in the House of Representatives and 53.0% of the seats in the Senate. In the European Parliament, 52.1% of seats were awarded to center-right parties, 43.6% to center-left parties and the remaining seats went to various splinter parties. In Europe, established parties invoked the Nazi and fascist past to keep parties of the political right down. However, a significant number of voters see this as a further attack in the culture war and support these parties in protest.

Between the "woke" and "anti-woke" movements, classical liberalism, which relies on the freedom and reason of individuals, is in danger of being crushed. The US political scientist Patrick Deenen, who is considered the intellectual mastermind of the new US Vice President J.D. Vance, recently proclaimed the beginning of the "post-liberal era" in the USA. The Trump administration would "dismantle a number of power structures ... that are now completely dominated by the progressive left" before there would be "a more comprehensive, more positive reformulation of the American political order" by the president following Trump. This would also fundamentally change Europe. European nations would have to ensure their own security and think seriously about what a successful political order is. In the long term, this

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<sup>2</sup> In 2015, the right-wing populist journalist Eva Herman spread the conspiracy theory in an article for the magazine Compact that the refugee crisis was the work of secret elites who were plotting to repopulate or destroy the values of the Christian West ([Umvolkung - Wikipedia](#)).



would be beneficial because "a more independent position in the world will be advantageous for all European nations and perhaps for Germany in particular".<sup>3</sup>

### **Geopolitics: Oceania against the rest**

*"With the absorption of Europe by Russia and of the British Empire by the United States, two of the three existing powers, Eurasia and Oceania, were already effectively in being. The third, East Asia, only emerged as a distinct unit after another decade of confused fighting."*  
George Orwell (1949)

With the rise of Xi Jinping as China's "indispensable leader", Vladimir Putin's efforts to restore a Greater Russian Empire and the failed "Arab Spring", a new world order has emerged since the mid-2010s which, compared to the order of the post-war period, is more akin to a disorder or "anarchy of states" (Herfried Münkler, 2021). A group of countries, led by China, Russia, North Korea and Iran, is hostile to the West. This "anti-West" wants to use the group of so-called BRICS-plus countries to position other nations such as Brazil or India against the West. Although these countries could be integrated into the group and contribute to an anti-Western stance in the United Nations, they are opportunistic enough not to burn all bridges with the West. They could therefore be described as "un-Western" rather than "anti-Western".

Donald Trump's presidency threatens to divide the West itself. Unlike the US governments of the post-war era, the new Trump administration wants to abandon the role of the "benevolent hegemon" towards Europe and distance itself from it. Donald Trump's "post-liberal" United States no longer sees itself in a "community of values" with Europe, but views Europe as a middle power that should stand on its own two feet. Cooperation with Europe as a middle power would be based solely on usefulness. Europe could certainly be helpful economically and as an ally against China, the USA's main adversary. However, the benefit as an ally against China would only arise if Europe were to shrink its economic relations with China to the reduced level of the USA. The Trump administration is likely to see only an economic benefit from relations with Europe as a supplier and customer of goods and services.

Europe is extremely ill-equipped for the battle between the USA and China for global supremacy and Russia's battle for a Eurasian empire. Internally divided and economically weak, it runs the risk of being crushed in these geopolitical conflicts. The European Union is suffering particularly from the economic and political crises in its core countries Germany and France. If the forthcoming new government in

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<sup>3</sup> See [After Donald Trump's election victory - "We are now in a post-liberal era" | Cicero Online](#).



Germany proves incapable of the necessary comprehensive economic reforms, Germany and France would jointly force the European Union into decline. If, contrary to expectations, the German government leads the country to new economic strength, the rift between Germany and France is likely to deepen and the crisis that used to blaze on the periphery of the eurozone will reach the core. In view of the entrenched political blockade there, France would hardly be in a position to catch up with an economically resurgent Germany. Without the possibility of an exchange rate adjustment, intense Franco-German economic tensions triggered by differences in competitiveness and rising inflation could ultimately tear the single currency apart.

In the "anarchy of states", wars in pursuit of national interests have once again become possible, from which new power constellations could emerge. These wars cannot be predicted, but they must be reckoned with. Among the many possible developments, three worrying but entirely realistic scenarios appear to be the most likely.

Scenario 1: China attacks Taiwan or establishes a sea and air blockade. The USA reacts by sending weapons and troops. A local war between Chinese and US expeditionary forces gets underway. The USA demands that Europe boycotts China economically. After several bloody but inconclusive battles, the USA and China shy away from escalating into a nuclear war and agree on a ceasefire. The conflict is "frozen"

Scenario 2: After subjugating Ukraine, Putin's Russia invades Latvia and Lithuania to create a land corridor to Kaliningrad. Belarusian forces support Russia by invading Lithuania. Poland attacks Russia and Belarus. Russia and Belarus defeat the Polish army and German troops stationed in Lithuania. Germany submits to Russia and accepts Russian military bases on its territory (as in GDR times). France and the United Kingdom hide behind the Rhine and the English Channel. They threaten nuclear war if Russia attacks them. Russia proclaims "Eurasia", which Hungary, Austria, Slovakia, the Czech Republic, Romania, Serbia and others voluntarily join. Eurasia extends to the Rhine in the west and the Italian Alps in the south. Switzerland, Italy and Spain declare their neutrality in agreement with Russia. The USA regards the reorganization of Europe as a local matter that does not concern it.

Scenario 3: The Trump government occupies the Panama Canal and Greenland with US military forces. It blackmails Canada into accepting the political status of a "free associated state" like Puerto Rico. Europe imposes economic sanctions on the USA and a transatlantic economic war begins.



The three (among many possible) scenarios could become reality separately or together. They are worrying not least because there is a clear loser in all of them: Europe, and Germany in particular. Whether they move from the "tail" to the center of the probability distribution depends largely on whether Ukraine can resist Russia. If Ukraine wins, Vladimir Putin will have to bury his dreams of a Russian empire and Xi Jinping will have to reconsider his intention to conquer Taiwan. Perhaps even Donald Trump would gain more respect for Europe and pursue his geopolitical goals peacefully instead of threatening violence. As in the Cold War, peace would be maintained by the rival powers keeping each other in check.

### Digitalization: From WWW to AI

*"(General Purpose Technologies) are once-in-a-generation technologies, like steam power or the internet that touch every industry and every aspect of life. And, in some ways, generative AI might be even bigger."*

*Ethan Mollick (2024)*

The Internet and the World Wide Web (WWW) have profoundly changed our world in recent decades. The origins of these technologies lie in the United States, and American companies have played a decisive role in their development and dissemination (see box). The USA is also leading the way in the next rocket stage of digitalization, artificial intelligence.

The term "artificial intelligence" was coined in 1956 at the "Dartmouth Workshop", which is considered the birth of modern AI (see Table 1 for further milestones in its development).<sup>4</sup> Researchers such as John McCarthy, Marvin Minsky and Claude Shannon laid the foundations of the discipline. In the following decades, AI research focused on problem-solving algorithms, expert systems and machine learning.

**Table 1 Milestones in US AI research and innovation**

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- 1960s-1970s: Development of expert systems and algorithms in the USA.
  - 1980s: Spread of AI applications in industry.
  - 1990s: Breakthroughs in chess and speech recognition (IBM).
  - 2000s: Rise of search algorithms, personalized advertising and machine learning by companies such as Google and Amazon.
  - 2010s: Breakthroughs in deep learning, autonomous systems and digital assistants.
  - 2020s: Further development of generative models such as ChatGPT and DALL-E as well as integration of AI into the cloud and company processes.
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Source: Flossbach von Storch Research Institute, own research

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<sup>4</sup> See [https://en.wikipedia.org/wiki/Dartmouth\\_workshop](https://en.wikipedia.org/wiki/Dartmouth_workshop).



### **The evolution of the Internet**

The Internet has its origins in the 1960s, when the US Department of Defense developed the ARPANET (Advanced Research Projects Agency Network) to exchange information between computer networks. The first successful communication protocol between computers was created in 1969, which was then considered the birth of the Internet. In the 1970s, researchers such as Vinton Cerf and Robert Kahn, funded by US government projects, created the TCP/IP protocol, which still forms the basis of the Internet today. Companies such as BBN Technologies (now Raytheon BBN) helped to implement the technology.

The World Wide Web was developed by Tim Berners-Lee at CERN in Switzerland in 1989, but it was collaboration with US companies that made its global spread possible. The first website went online in 1991, and in the years that followed, American companies were instrumental in commercializing and popularizing the web. In 1994, Netscape developed one of the first widely used web browsers, the "Netscape Navigator". This browser made the WWW accessible to a wider public and ushered in the era of commercial use of the Internet. Nineteen ninety-eight Founded by Larry Page and Sergey Brin, Google revolutionized the way people find information on the web. The introduction of a powerful search engine made the web more user-friendly and contributed significantly to its spread. Amazon, which was founded in 1994 as an online bookseller, built a platform under Jeff Bezos that revolutionized e-commerce. The internet established itself as an important channel for trade.

Microsoft played a key role in the spread of the internet with Internet Explorer and Windows operating systems. The integration of browsers into operating systems made access to the web even easier. Companies such as Facebook (now Meta), Twitter (now X) and later Instagram and TikTok (originally a US start-up before being acquired by China's ByteDance) turned the internet into a social space and changed the way people communicate worldwide (in the eyes of some, comparable to the invention of the printing press). With the introduction of the iPhone in 2007, Apple brought the Internet into people's pockets. Smartphones enabled mobile access to the WWW and were another milestone in Internet usage. Companies such as Amazon (AWS), Google (Google Cloud) and Microsoft (Azure) created the infrastructure for modern cloud computing. These services enable companies and users worldwide to access computing power and data in real time.

Source: Flossbach von Storch Research Institute, own research.

US universities such as MIT, Stanford and Carnegie Mellon founded AI laboratories that carried out groundbreaking research. Government funding from organizations such as DARPA (Defense Advanced Research Projects Agency) played a key role in financing these projects. IBM was one of the pioneers of AI. The supercomputer "Deep Blue" defeated the world chess champion Garry Kasparov in 1997 - a milestone in the history of AI. The company was also a leader in the development of expert systems and early speech recognition technologies.

Microsoft invested in AI research early on and developed products such as the digital assistant Cortana. In recent years, Microsoft has played a central role in the further development of AI by investing in OpenAI (the company behind the GPT models). Google revolutionized AI through its search algorithms and later through



the acquisition of DeepMind. This company developed AI systems such as AlphaGo, which defeated the world's best Go player in 2016. With TensorFlow, an open-source library for machine learning, Google provided the research community with a powerful tool.

Amazon introduced AI into everyday life, in particular through "Alexa", its voice assistant, and by optimizing logistics and e-commerce with AI. With AWS (Amazon Web Services), the company provides scalable AI services that are used worldwide. Facebook (Meta) uses AI to optimize personalized content and advertisements. The company is investing heavily in research into machine learning, image processing and natural language processing.

OpenAI (founded in 2015), an originally non-profit company based in San Francisco, developed some of the most advanced AI models, including "ChatGPT 3" and "ChatGPT 4". OpenAI drove research into general-purpose AI systems and made them accessible via platforms such as Microsoft's Azure cloud. Apple was also an early adopter of AI in its products, for example with the Siri voice assistant and advanced image processing in the iPhone camera. With special AI chips in its devices, Apple is promoting the use of AI on end devices (edge computing).

Artificial intelligence (AI) has the potential to profoundly change the economy (Mollick, 2024). It can significantly increase productivity in areas such as data analysis, customer service and manufacturing by automating many repetitive and time-consuming tasks. New business models and services such as self-driving cars, personalized medicine and smart household appliances will become possible. New jobs will be created and old ones will disappear. Social and economic inequality are likely to increase, at least for some time.

### **Effects: The decline of Europe**

*"Behold...the relics of Rome, the image of her pristine greatness! Neither time nor the Barbarians can boast the merit of this stupendous destruction: it was perpetuated by her own citizens, by the most illustrious of her sons."*

*(Francesco Petrarca)<sup>5</sup>*

Whether disruptions lead to creativity or destruction alone depends largely on how flexible the structures of the system affected by the disruption are. If the structures are highly rigid, adaptation is impossible, and disruption leads to destruction if its pressure exceeds the resilience of the system. One way to assess the adaptability of an economy is to examine its response to past disruptions that it has survived.

Figure 1 shows the development of labor productivity (measured as real gross value added per employee) in the USA and the 27 countries of the European Union since

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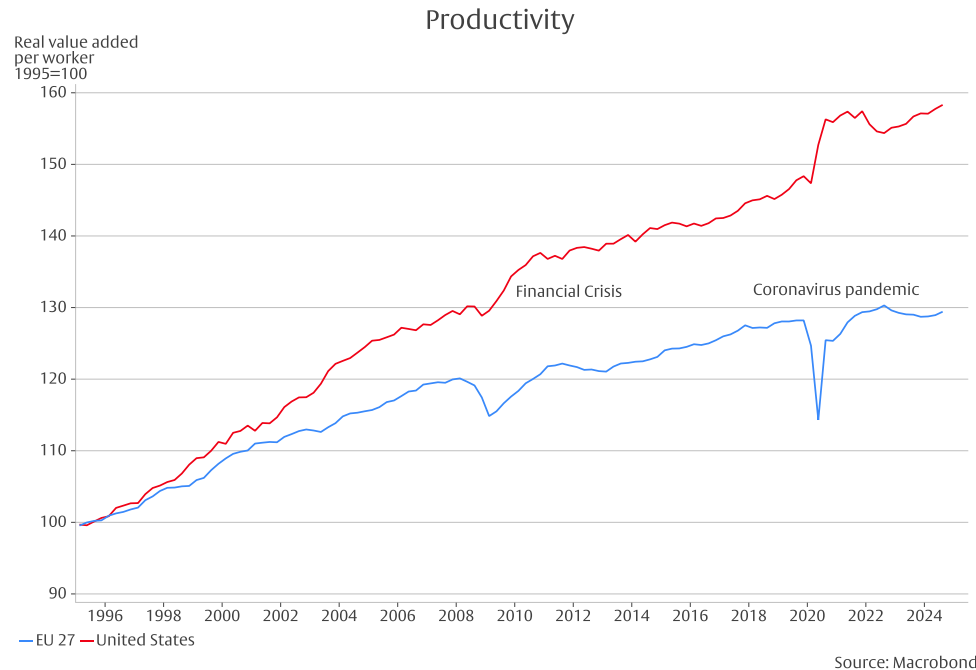
<sup>5</sup> Quoted from Gibbon (1776-1778).





1995. During this period, both economic systems were hit by two disruptions associated with crises. In 2007-08, the banking and financial crisis in Western industrialized countries shook the systems, and in 2020-23, the global coronavirus pandemic.

**Figure 1**



During the financial crisis, the recession led to a decline in productivity in both economic areas. However, the slump was greater in the EU than in the US. The recovery in the EU was also weaker and lasted longer than in the US (+6.4% in the 10 quarters up to the third quarter of 2011 in the EU versus +6.7% in the 8 quarters up to the fourth quarter of 2010 in the US).<sup>6</sup> Overall, productivity grew at annual rates of 2.3% in the US and 0.5% in the EU from the peak values before to after the financial crisis.

The different adaptability of the systems became more apparent during the coronavirus pandemic. Due to the repeated lockdowns, the economy fell into recession in both the US and the EU. However, politicians reacted differently. While unemployed workers in the US were laid off and received unemployment benefits, employers in the EU were subsidized to avoid layoffs. As a result, productivity rose sharply in the US during the pandemic as predominantly less productive workers lost their jobs, while it fell in the EU as workers kept their jobs despite the loss of production.

After the pandemic subsided, workers in the EU mostly returned to their old jobs, while a significant proportion found new jobs in the US. As a result, productivity

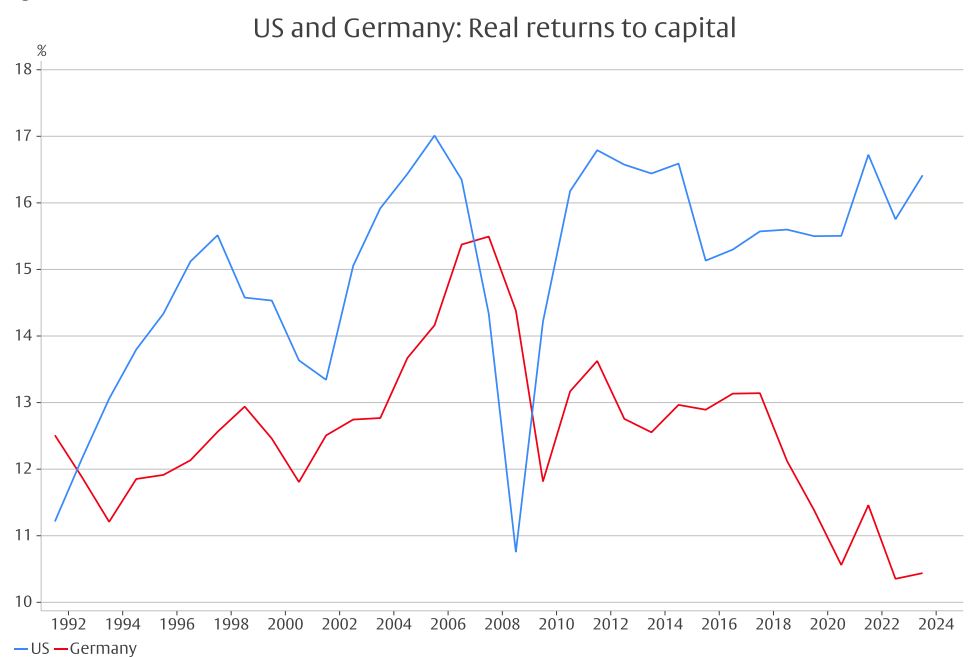
<sup>6</sup> The euro crisis of 2010-2012, which followed the financial crisis, once again depressed productivity in the EU from the third quarter of 2011 to the first quarter of 2013.



rose again in the EU, while it fell in the US from its temporary high as less productive workers returned. Overall, productivity rose at an annual rate of 1.4% in the US and 0.2% in the EU in the period from the fourth quarter of 2019 to the third quarter of 2024.

The development of productivity in the period under review is reflected in the development of investment income in the USA and Germany, the largest member state of the EU. During the financial crisis, investment income collapsed in both economic areas (although the fall was even greater in the USA than in Germany) (Figure 2). Subsequently, returns in the US recovered to pre-crisis levels, while they remained significantly lower in Germany. The coronavirus pandemic had no visible impact on investment income in the USA, while in Germany income fell to its lowest level since reunification and remained there.

**Figure 2**

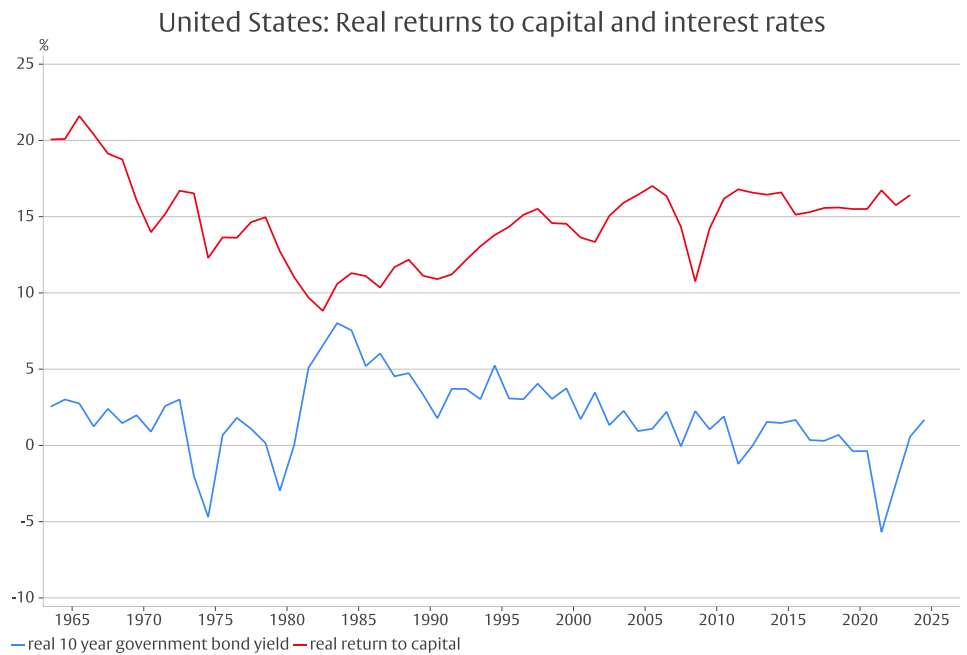


Source: Macrobond

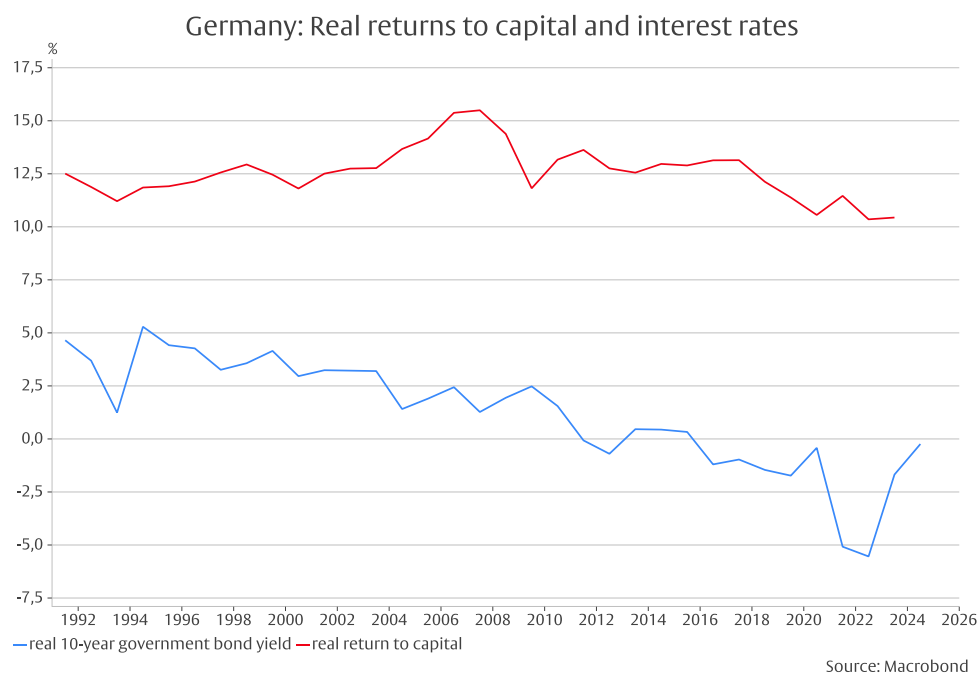
It is worth noting that the fall in interest rates in the US caused by monetary policy did not lead to the emergence of a "zombie economy" with low productivity growth, as was observed after the bursting of the "bubble economy" in Japan in the early 1980s. A key reason for this is likely to have been that the fall in real interest rates to and at times below zero did not capture the returns on capital sought by companies (Figure 3.) Despite low interest rates, this did not result in the preservation of less productive companies and unprofitable investments. In contrast, real investment income in Germany has followed the downward trend in real interest rates since the financial crisis (Figure 4).



**Figure 3**



**Figure 4**



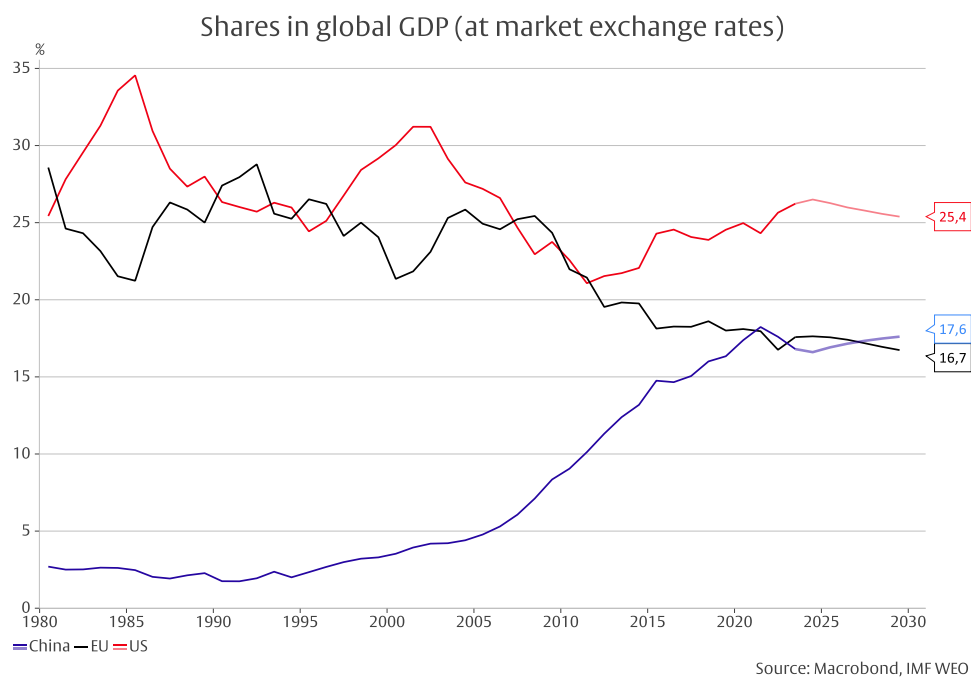
## Conclusion

The twenties of this century marked the beginning of a period of multiple crises and disruptions. This is reminiscent of the twenties of the twentieth century. Back then, this decade marked the decline of the European states as world powers and the rise of the USA. At present, there are no signs of another change of baton at the top of the world. The most important reason for this is probably that China lacks the ability



to benefit from creative destruction due to its totalitarian leadership and centrally planning. While an all-dominant party led by an "indispensable leader" governs the people and the economy there, a "windy businessman" with whisperers from the techno-libertarian entrepreneurial camp rules in the USA. Although this does not correspond to the classic liberal claim of a rule-based economic and social order, it is likely to be superior to the centrally planned bureaucratic and centrally planned totalitarian leaderships of Europe and China. Accordingly, the projections of the International Monetary Fund show that the USA's share of global gross domestic product has been increasing again since the middle of the last decade (Figure 5).

**Figure 5**



As we all know, history does not repeat itself, but sometimes it rhymes. In the coming years, the fate of Europe could rhyme with that of the ancient Roman Empire. As described in Edward Gibbon's masterpiece and by contemporary historians such as Peter Heather (2007), Rome perished because of the inability of its citizens and leadership to cope with the fundamentally changed circumstances brought about by the migration of peoples. As in Rome then, an "irresistible force meets an immovable object" in Europe today. If the object is immobile, it is destroyed.

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