

2020-2030





Collapse of the US Dollar

Wild card 2023-2028

The value of the US dollar (USD) may experience a sharp decline or even collapse. Should this happen, it would be driven by both an event that would severely undermine confidence in the performance of the United States' economy and an alternative currency or commodity that dollars could be replaced with. A collapse of the dollar would probably end the superpower status of the US and cause global economic turmoil.

Background

The US dollar has played a solid role in the world economy: the dollar has been the main reserve currency, and the USA's economy has been a leader in both size and innovation. Global confidence in the US economy has kept demand for the dollar high, which has allowed the US to become heavily indebted.

However, a sudden loss of confidence in the performance of the US economy could lead to a sudden decline in demand for the dollar, and thus its value. A viable alternative to the dollar would also be needed for this to happen.

While the dollar's position appears to be gradually weakening, a direct collapse in its value is an unlikely, though not impossible, scenario. A collapse could become a more probable scenario if several nation states rapidly stopped using the US dollar as their reserve or trading currency, leading to a decrease in demand. A sudden and dramatic worsening of internal problems in the US could also undermine global confidence in the dollar and, thus, its value.

Impacts

A sudden collapse of the dollar would push the global economy into a shock. Imported goods in the US domestic market would become significantly more expensive, impacting directly the countries exporting goods to the US. The current ability of the US to accrue debt seemingly indefinitely would also come to an end.

A collapse in the value of the dollar would likely mean the end of the US as a superpower. The country could no longer invest debt money in its armed forces, which have played a key role in safeguarding its interests around the world. The global geopolitical balance would change radically, and the world would enter a new era.



Geo-Economic Blocks

Wild card 2020-2023

The world may divide into geoeconomic blocks. Economic and technological competition and the need to ensure the resilience of one's own supply chains may drive the great powers to repatriate critical manufacturing functions. This would weaken globalisation and create largely economically self-sufficient zones such as the EU, North America, and China-led East Asia.

Background

Technological and economic competition, especially between larger nation states, and the vulnerability of the supply chains, may lead to a situation where the world divides into geo-economic, largely self-sufficient zones. Each zone would self-produce the goods that it considers critical and would only import raw materials and products that don't have any strategic significance.

The blocks could also diverge technologically, with each block developing technology for its own needs. The other blocks would not adopt these technologies due to fears of industrial espionage or harmful features. Both software and hardware would be produced under the blocks' own surveillance.

The block-oriented development would be mainly enabled by the fourth industrial revolution-related automated and robotised manufacturing technologies which would reduce the significance of labour costs. Active, security interests-based monetary support from governments would play a significant role as well. Another background driver may be the reactions from early stages of the COVID-19 pandemic when each nation state prioritised its own needs and disregarded those of others.

Impacts

Geo-economic blocks would likely form around the largest economic zones, and they would be economically self-sufficient to a large extent. In Europe, the EU would take a more significant role as the guarantor of the continent's economic interests. North America, led by the United States, would form its own zone, and in East Asia, China together with its neighbours would form a block. South America, Africa, Oceania and Russia would end up as satellites of the more established blocks. It is also possible that entirely new blocks could be formed outside the most significant economic areas if one of the regions is considerably weakened.

The formation of the blocks would likely reduce global trade, decrease economic growth, and increase the risk of conflicts. The technological development could diverge; for example, research on space technology and AI would concentrate in North America and China, while Europe would focus on the circular economy.



Geopolitical Impacts of Coronavirus

Wild card 2020-2023

COVID-19 is likely to change the geopolitical balance of the world. China's position as the other leading power in the world is likely to be cemented due to the pandemic, and the role of the United States will be weakened. In Europe, the future of the European Union may be at risk. The world is more and more likely to be divided into blocks.

Background

China's, at least claimed, ability to stop the coronavirus epidemic within its country borders has increased its international influence.

Meanwhile, the United States is increasingly retreating into its shell due to the pandemic, and the country's administration has failed to demonstrate the kind of global leadership that has usually been expected from it.

In Europe, the pandemic has made it clear that in times of crisis, all talk of pan-European values and interests stops, with each state safeguarding its own interests. Russia, in turn, seeks to benefit from the situation, first and foremost through information operations that create confusion and fear abroad.

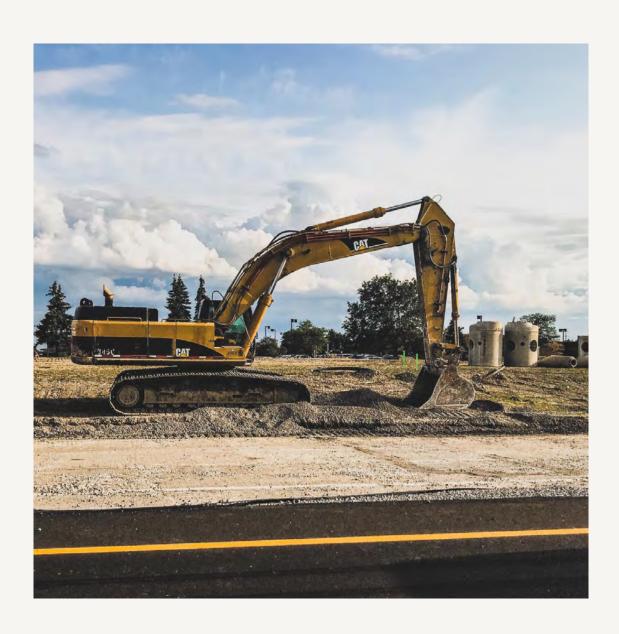
Machine learning may also be done in real-time. The *Google Car* project is a good example; incoming data is analysed on the fly (or rather on the drive). A rapidly growing industrial field is using machine learning for bots that act as APIs (application programming interfaces). Using Natural Language Processing, these bots analyse speech, texts or tags. Here the data set is large over time, and results improve respectively.

Impacts

The coronavirus pandemic could strengthen China's geopolitical position at the expense of the United States, causing potential friction in the Pacific. Under the guise of the virus, China may also be trying to promote a solution to the Taiwan issue. In both countries, there is a real risk of internal conflict if the pandemic eventually ends up causing massive economic damage.

In Europe, instead, the entire union may be at risk if the nations fail to get the pandemic under control. As a result of the pandemic, every state has become aware that multinational decision-making may not work in times of crisis. Europe may even witness a local reversal of democratisation if the exceptional measures enacted under the pandemic remain permanent in some countries.

Overall, the pandemic may put an end to the development of liberal globalisation and lead to a situation where the world divides into blocks. Each geopolitical block would mainly produce its own commodities and operate in a competitive environment against the other blocks. Europe, North America and China would be the world's leading blocks, and Japan and Russia would seek an alliance with them as they see fit.



Smart and Connected Countryside

Wild card 2024-2028

The development of smart technologies and networks will create new opportunities to bring life to rural communities. If the technologies can improve livelihood conditions, access to services and the effectiveness of logistics, the countryside may become vitalized in a completely new way, instead of continuing to die out. However, this is unlikely to happen without a bold strategy as well as without a long-term investment to support it.

Background

The countryside is in peril in all the developed countries: the rural populations are diminishing because almost all the opportunities for work and study, not to mention services, are located in the cities. However, emerging technological solutions may help improve this undesirable situation. At best, they will bring about a comprehensive reform of how the countryside and its potential are perceived.

Many governments have smart rural development initiatives to prevent rural depopulation by bringing smart infrastructures and broadband access to the countryside. For example, China is plotting a 'digital villages' project with the aim to close the urban-rural digital gap. Similarly, the European Network of Rural Development has identified smart villages as one of its key areas for future reform.

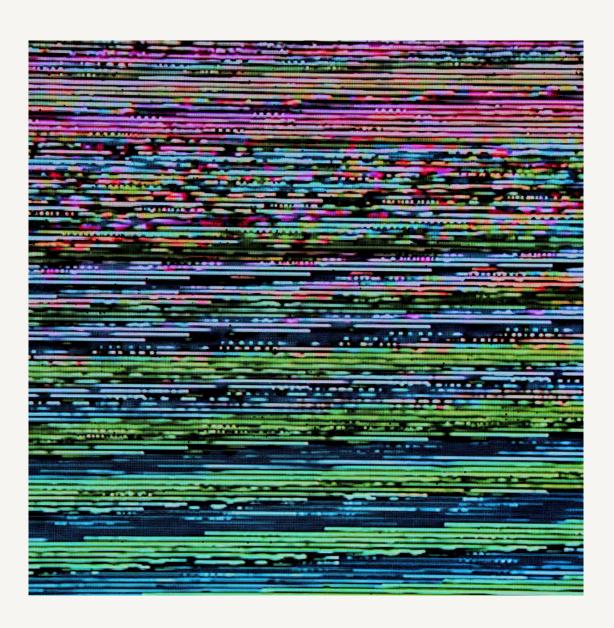
In the public sector, investments in telecommunications infrastructure and intelligent technologies will enable online-based services for rural communities – for example, when it comes to education, healthcare and public administration. This will increase their efficiency and make them more personalised. Equally, the private sector will see wider opportunities to offer and produce a diverse range of services and products to the people outside the population centres.

Smart solutions can make traditional rural work much easier in a variety of ways. For example, real-time data and Al-based software can be used to optimise many different kinds of crop operations and inputs. Smart feedback loops enabled by IoT (Internet of Things) can also ensure local security of supply and optimise resources in rural areas.

Impacts

The digitalisation of rural areas will fundamentally change the industries that have traditionally dominated the countryside, such as agriculture and forestry, both as industry sectors as well as occupations. Smart and connected countryside will also offer new revenue streams to businesses by enabling access to untapped markets. If smart countryside ushers in a new era of teleworking, this may also decentralise business innovation hubs and allow HR departments to access broader talent pools.

The challenges of growing cities, the rising appreciation of nature and the improving potential for remote working and telepresence may encourage the population to move from cities back to rural areas, provided that the emerging technologies will enable different lifestyles, a diverse range of services and a high standard of living regardless of the individual's physical location. Freedom to choose where one wants to live will also increase if traditional education and full-time employment lose their importance in the society.



Completely Corrupted Internet

Wild card 2024-2028

According to Tim Berners-Lee, there is a risk that the Internet becomes completely corrupted if no measures are taken to save it. There are three trends that increasingly threaten the Internet: people losing control over their personal data, misinformation spreading fast, and political advertising lacking transparency. However, if implemented, Semantic Web or Web 3.0 can help fix the problems of a corrupted Internet.

Background

Nearly half the globe is online. The inventor of the WWW, Tim Berners-Lee is concerned about the current state of Internet, as companies demand personal data against free content and services: "It creates a chilling effect on free speech and stops the web from being used as a space to explore important topics, such as sensitive health issues, sexuality or religion," Tim Berners-Lee says to The Guardian.

Misinformation spreads like wildfire because it is in the interest of search engines and social media sites that users click and share. Truth and facts are not profitable for their business models: "With the help of data processing and bot armies, evil parties can take advantage of the system and disseminate false information for either economic or political gain," Berners-Lee says.

Political advertising benefits from social media profiles that help customising messages to voters: "Targeted advertising allows a campaign to say completely different, possibly conflicting things to different groups. Is that democratic?" he asks.

Ownership over our data is one of the solutions that could "fix the Internet". Berners-Lee believes that to achieve this, search engine and social media companies need to collaborate. Also, changing the logic of web content and service revenue to subscriptions and micro payments is part of the solution: "We need more algorithmic transparency to understand how important decisions that affect our lives are being made." Berners-Lee has it right, but will companies like Google want to help us gain control over our data?

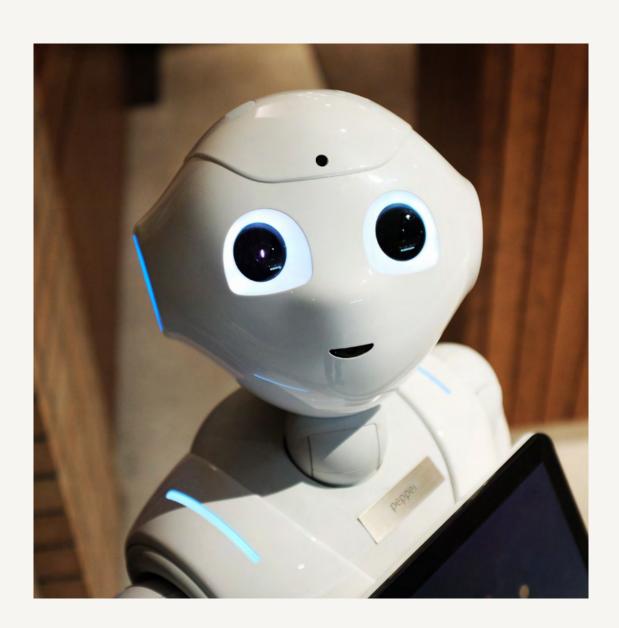
One paradox haunts the Internet. We are concerned with the surveillance by nation states and companies regarding our personal Internet use. We should be able to be anonymous and untraceable. Well, companies and spammers enjoy the same liberty. The paradox is then that while we want privacy, we don't want to be accountable for our online behaviour.

Accountability could be a solution to some of Internet's current problems. This means linking data to those who publish it in an authenticated way, and giving levels of trust to sources. For instance, the Blockchain could offer technical means to do so.

Impacts

One solution to the problems of the corrupted Internet could be the Semantic Web conceived by Berners-Lee, where all information can be processed, interpreted and analysed by computers without human assistance. According to Berners-Lee, privacy would then be built directly into the architecture of the Semantic Web, and people could easily find out what kind of information companies, for example, have about them.

In addition, Web 3.0 can save the Internet from corruption, as its decentralised blockchain protocol enables transparent and open Internet access and restores the Internet to its democratic roots by shifting control back from businesses to citizens. A failure to stop the concentration of power on large Internet companies could have serious consequences for freedom of expression, democracy and the privacy of citizens.



Technology Hype

Wild card 2024-2028

As artificial intelligence, automation and robotics solutions advance, many organisations invest in new technologies with great expectations. Instead of productivity gains, the result may well be huge losses and disappointment because the development may still contain delays and problems; perseverance and human needs may very well be lost in the midst of technology hype.

Background

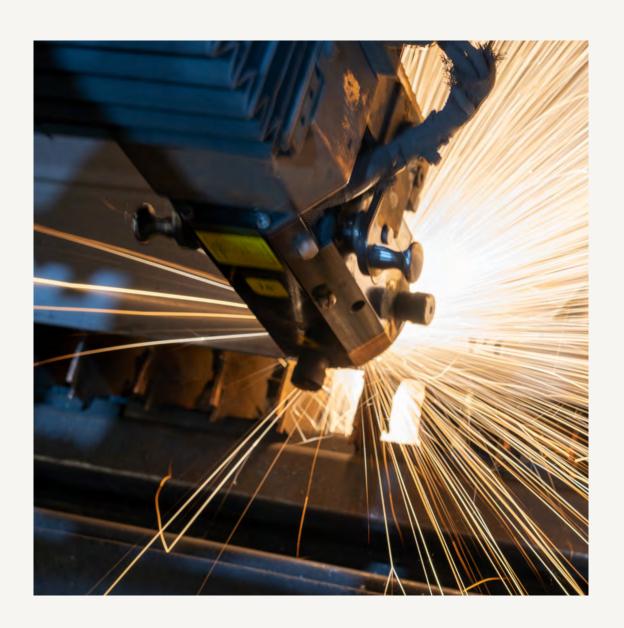
New production equipment or concrete technology that increases the efficiency of operations are often considered far more desirable and easy to justify than similarly sized investments into other means of increasing the value of immaterial capital. There is a risk in focusing merely on new technologies that enhance production or service processes, as their availability, application possibilities and potential promises grow.

Developments in both old and new fields of industry, as well as the success of companies in the operating environments of the near future, require many-sided investments and changes. Less concrete innovations and investments that create immaterial capital remain essential, as new technologies are still unable to run our societies and businesses without human help. Moreover, the development of artificial intelligence may still run into unexpected quality and structure problems, as well as organisational, political, and financial delays.

Comprehensive utilisation of new technologies and completing supporting change processes are far more challenging tasks than mere technology investment or acquisition processes, as they require building up a new kind of organisational culture, cooperation between many individuals, and adaptation on the personal level. Besides smart technology, success may well require even more thorough and versatile investment than ever before into, for example, education, management and supervision, development of new work methods, workplace wellbeing, communication, customer and client relations, and branding.

Impacts

Investments into artificial intelligence may prove a bursting bubble - at least in the short run. It is well possible that succuss and growth are available only to organisations who adopt AI slower, with restraint, and with eyes on the long-term and the big picture. Despite the massive future promises related to artificial intelligence, it remains essential for organisations in the near future to be able to utilise the best qualities of new technologies, as well as those of staff. If human beings and other "soft" issues are overshadowed by large, "hard" and concrete issues, the resulting one-sided investments will most likely translate into losses instead of profits.



Return of Heavy Industry

Wild card 2024-2028

It is possible that the western world could experience the return of the heavy industry. If the digital and immaterial services were to decrease in importance, it could lead to capital moving back to manufacturing industry, which will undergo productivity leaps through automation, AI/ robotics and, for example, 3D printing. The present low-cost manufacturing countries may, in the future, experience changes which could fundamentally reduce their competitiveness in relation to the production which takes place near the consumer markets.

Background

The next technology-driven productivity boost is feverishly awaited, and the pressures to launch rapid growth are immense. In the contemporary thinking, the roles of innovation, digital services, start-ups, and other immaterial goods are emphasised as drivers of growth. Heavy industry is often presented as a dying breed. However, many still view that heavy industry has unbeatable strengths.

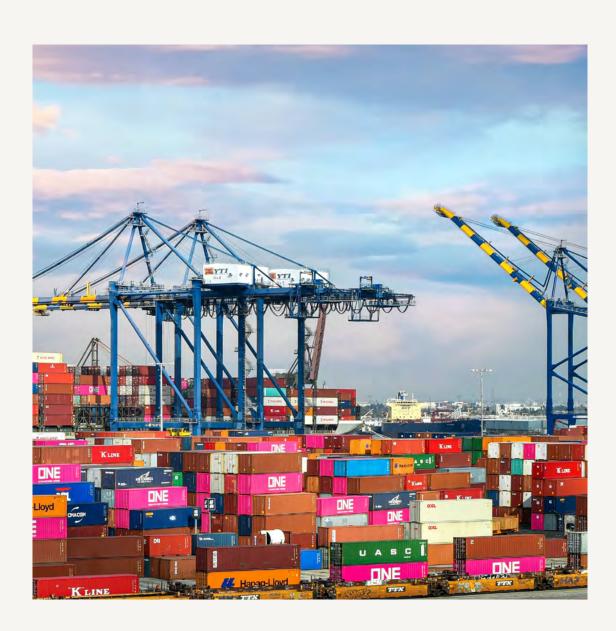
First of all, this industry is still one of the greatest sources of economic activity, employment, and tax revenue in many post-industrialised countries. Even though the share of digital services in total production increases rapidly, their employment impact is rather miniscule compared to heavy industry. Some advocates of traditional industries fear that, in the end, the immaterial economy turns out to be another bursting bubble. Further, from the viewpoint of traditional industry, the development of automation, robotics and Al solutions also includes immense opportunities which could rethrone the production of physical goods as the leader of the economy.

Companies which have, at least partially, brought their production back, are Adidas - which has built a highly automated factory in Germany - and Ford, which has decided to invest in its US factories instead of its Mexican ones.

Impacts

The return of heavy industry or manufacturing in general may lead to an increase in well-paying jobs, regardless of their degree of automation, and to an expansion of goods selection. Domestic production would also reduce dependence on exports, potentially decreasing production and supply risks.

The return of heavy industry could also create a basis for new supply chains, and thus improve know-how and employment. Automation, use of IoT technology and efficient use of data could make production cost-efficient. In the future, the geographic divergence of logistics chains may also lower the political risks for businesses.



Deglobalisation

Wild card 2020-2023

The era of globalisation may be coming to an end, disintegrating the world's complex interdependencies as a consequence. Reasons for deglobalisation include a widespread rise in nationalism, a serious weakening of the liberal hegemony driven above all by the US, as well as the need for different countries to ensure their own security of supply by reshoring critical production.

Background

Globalisation, or the process of interaction and integration among people, companies and governments worldwide, is thought to be an ongoing process driven by both economic interests as well as technological inventions. The progress of globalisation, especially since World War II, has been especially aided by the hegemony of the US, which has enabled favourable conditions for trade between many nation states. However, there is now an increasing amount of talk about both the development of 'slowbalisation' or the slowdown of globalisation, and deglobalisation or the disintegration of globalisation.

Despite its strengths, globalisation has also caused dissatisfaction in North America as well as Europe: the relocation of jobs abroad has severly affected the lower classes. This has led to the rise of nationalist and populist movements. Trump and Brexit are the most poignant examples of this. If internal problems cannot be resolved, protectionist forces may gain more and more foothold in different countries. Particularly, if the United States started withdrawing from world affairs, it would cause major problems for globalisation.

In addition, the 2020 coronavirus pandemic revitalised the political debate about reshoring or, at least, bringing closer the production chains that are vital for the security of supply. Reshoring would reduce critical vulnerabilities in each country. This thinking focused on security of supply becomes a significant political factor, this will have a negative impact on globalisation.

Impacts

Deglobalisation may proceed at different paces in different regions: some regions may remain active in trading with other nation states, while others would favour extensive self-sufficiency. This "reverse integration" could also take the form of some countries remaining in favour of globalisation, and others opting out. The disadvantage of this development would be significant, especially for small countries, as large players would be better able to safeguard their economy and sovereign interests.

A reversed globalisation could, in the worst case, lead to a world where each nation state would largely take care of its own needs. In practice, this would certainly mean both a fall in living standards and a significant slowdown in technological development. It might also be possible that the division of the world into those in favour of and those opposing globalisation would even lead to conflicts as self-sufficient countries would be looking to conquer resource-rich territories for themselves.



Collapse of World Economy

Wild card 2024-2028

It is possible that the current global economy based on virtual money, leverage, various futures contracts, speculative financial instruments, and stocks with freely floating values will collapse one day. If this happened, almost immediate shortages of imports and many basic goods would be experienced all around the world. In that case, many states would not be able to collect enough taxes to continue their operations, which would lead to shutting down most public services.

Background

The world economy and societal development are largely built on the premise of continuous economic growth. Keynesian economic policy insists that the economy needs to be strongly revitalised when an economic downturn is about to hit. All that's needed is the ability to deal with the costs of borrowed money.

Often this means that interests and other related costs are covered with new loans. This has been particularly common in Mediterranean countries and the US. Such practice goes against common sense. The limit to taking new debt is reached when the nation state is no longer able to take care of the interests applied to the loans. It seems that the debt is only used to buy time.

In the long run, continuous growth cannot be taken for granted. The global economy is facing a great number of risks. One great fear is the potential collapse of the Chinese economy or the Chinese state, and another is the collapse of US economy due to excessive debt or lack of economic dynamism. A third potential risk stems from Europe: spreading crises within the Union and its potential dismantling. A fourth threat is a lack of confidence from net debtors that could surface due to some surprising event, perhaps comparable to the crises involving Enron, Lehman Brothers, or the US sub-prime bubble. A fifth risk is large-scale warfare, and the sixth a major crisis involving built infrastructure or the environment, which could lead to scarcity of water, energy or food.

Impacts

All the above-mentioned threats could end global economic growth or, at worst, cause the whole economic system built on virtual assets and stocks to collapse.

Adjusting to the new situation and building a replacement for the collapsed system would be lengthy processes which would force the global economy and societies to suffer constant instability for years to come.

On a national level, such crisis would be seen as serious troubles to maintain existing basic functions and systems, as collected taxes would not be sufficient to pay for the contemporary level of public services. The troubles of international trade would not only mean less money in circulation but also a scarcity of many basic goods.



Clash of Social Bubbles

Wild card 2020-2023

In developed countries, different parts of the population may become so estranged from each other that understanding the everyday realities of people outside their own social bubble becomes difficult or outright impossible. Contradictions between groups with differing values and traditions, and between geographical areas, could escalate to serious conflicts and, possibly, even lead to civil wars where different social groups would demand autonomy.

Background

The 21st century has largely been marked by a clash between liberal and conservative values. On the one hand, movements such as intersectional feminism and LGBTQ+ demand fundamental changes in societal and political structures. On the other hand, the global rise of conservative populism reflects a nostalgia for a past where things were simpler and hierarchies were clearer.

As social media starts to become the people's primary source of news, the personalized optimization of information in these platforms increasingly distorts people's perception of reality and lets them overestimate the prevalence of their world view. Constant reinforcement of one's beliefs also makes people more intolerant and less empathetic towards different world views, and weakens the norms of open debate and dialogue.

Moreover, with the increasing tensions between different political spectrums and the ease of sharing personal views on the internet, remaining neutral is also gradually ceasing to be a choice. For instance, people are increasingly demanding public figures such as celebrities and brands to voice their opinions on social and political issues to determine whether to support or boycott them. This reflects an emerging desire among people to curate all aspects of their lives according to their values and world views.

Impacts

Individualised optimisation of information, weakening of journalism and increased opportunities to share strongly opinionated content through social media to sizeable audiences may gradually break the moderate majority into two opposite sides of the political spectrum. Social media algorithms can also be abused by politicians to push deceptive narratives and breed more hostility among different social bubbles.

People could end up moving to neighbourhoods where everyone shares the same socioeconomic status and a similar worldview and set of values. The differences in the values and prospects of geographical areas would become clearly visible in politics and media, as well as on the streets. Also, demonstrations and violent conflict would become more common and lead to an even greater divide within the society. In an extreme scenario, this could even lead to civil wars. An increasing number of areas, cities, and neighbourhoods could even start demanding autonomy or independence.

