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Master of Science Thesis

THE IMPACT OF COVID-19
ON THE GLOBAL ECONOMY AND BUSINESSES

INNOVATIVE WAYS TO ORGANIZE
A COMPREHENSIVE RESPONSE TO CRISIS

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Abstract

At the dawn of 2020, the global economy recorded its tenth year of unprecedented uninterrupted growth, while economists and government financial officials predicted that such dynamics would continue for years to come.

But then came a mysterious virus that was first seen in China in December 2019 - a new type of coronavirus that has spread rapidly across the globe. Its appearance dispelled hopes for a continuation of the economic rally and provoked the sharpest recession in decades. The International Monetary Fund estimates that the global economy shrank by 4.4% in 2020. For comparison, in 2009, when the world last faced a financial crisis, global GDP fell by 0.1. Business closures and other government-mandated lockdowns in many parts of the world have led to a surge in unemployment not seen since the Great Depression. However, the levels of the number of unemployed in different countries of the world vary significantly.

The global economy is recovering from the impact of the pandemic, but this process is slowed by the emergence of new variants of the coronavirus, geopolitical tensions and supply disruptions. The devastating socio-economic impact of the COVID-19 pandemic will be acutely felt throughout almost the entire world in the coming years. A reliable and sustainable recovery of the world economy, according to UN experts, is possible only if investments are made in the economic, social and climate sustainability of the planet in accordance with the current difficult situation. The IMF notes that projections are based on the assumption that the epidemic situation around the world will improve by the end of 2022, the percentage of the vaccinated population will increase everywhere, and coronavirus treatments will become more effective. The global coronavirus epidemic has the potential to change entire industries and the behavior of businesses and consumers. The move to online shopping could become a long-term trend, as could workers telecommuting.

The purpose of this study is to analyze the degree of impact of COVID-19 on the development of the global economy within the current unfavorable economic environment, assess the depth of the negative impact on world markets and trade, predict the scale of the negative impact on the global economy in the coming years and the possibility of a crisis or super crisis in the near future. We will also consider new trends in the development of the world economy and prospects for post-crisis recovery.

1. Introduction

The economic crisis as a phenomenon is not new. Economic slowdowns and recessions have accompanied the modern world economy constantly. In the entire history of modern mankind, global economic crises have occurred more than 20 times on the planet - negative phenomena in the political, financial, banking, social sphere, leading to:

- imbalance between consumer demand and available balances in the enterprise;
- reduction in production volumes;
- changes in pricing policy, the system of mutual settlements;
- unemployment and poverty;
- collapse of the largest enterprises, banks and bankruptcy of individuals.
- Crises, according to experts, are spontaneous in nature, they cannot be predicted and prevented.

In the 20th century, the United States became the birthplace of most crises. So, in 1900-1903, the crisis in the United States arose due to overproduction. In particular, the world economic crisis of 1929 turned out to be such, when the value of shares suddenly fell, business activity decreased, which entailed consequences in the form of unemployment, bankruptcy of financial and manufacturing companies, inflation, and the collapse of the agricultural system. The exact causes of the "Great Depression" are not named, but they boil down mainly to the following - the creation of an "exchange bubble", monetarism, a lack of money supply, and an increase in margin loans. The United States and a number of other countries of North and South America were able to get out of this state only by the end of 1930s, when measures were introduced aimed at changing the social, political and banking spheres.

The next crisis arose after the world wars in the seventies and it was associated with a military conflict in the Middle East, which affected the oil industry. Then comes the collapse of the dot-coms in the early 2000s. This crisis was caused by massive investments in Internet projects.

The last financial shocks happened 14 years ago and comparable in scale to the "Great Depression" is called the global economic crisis of 2008, when for the first time in the history of modern mankind, such an indicator as GDP showed a negative trend. And they began with a mortgage crisis in the United States, and then spread globally. World trade has collapsed, the “dominance” of the dollar has been revised, and there has been a significant increase in the price of oil and gold. During this period, they began to talk about income inequality, about widespread unemployment and poverty. An international declaration served as a guide for overcoming the crisis, which contained advice on revising the activities of financial institutions, reorganizing market relations, and adjusting social policy.

How is the 2020 crisis related to the 2008 recession? The slowdown of the world economy in 2008 began to occur when the system and balance in the world began to change. A number of factors contributed to this. If past crises started in Europe and the US, then the new one had to start in Asia. A prerequisite for it was the growth of the economic influence of the Asian region, first of all, China and then India. It all started with the transfer of production from developed economies, i.e. from the USA and Europe to Asia and Latin America. Production began to drop, while consumption in Europe and North America remained at a high level.

How did those in power begin to solve it? They did not come up with anything new and began to get even more into debt: state, corporate and household debts. The world has been driving itself into debt since the 80s of the 20th century. For almost 30 years, the level of debt reached sky-high heights, which led to the formation of a huge debt bubble, which burst in 2007-2008 in the US mortgage sector.

But the problem was that although it all started in the States, the entire economic world at that time, in particular European banks, was connected with them. A year before the collapse began, debt obligations between Brussels and Washington were in the trillions of dollars. And when the US mortgage sector began to collapse, it pulled European banks along with it. So, in 2008, Lehman brothers went bankrupt, followed by other banks in Europe.

At that time, the US and Europe were forced to cooperate in order to survive. Thus, the Fed began to distribute liquidity, and European banks received a little less than 50% of this liquidity. If they had not received it, then Europe would have collapsed, pulling the States along with it.

The Great Recession of 2008 was completely over by 2015. When we say "completely" we mean that the situation has leveled off, but, unfortunately, the causes of that crisis have not been eliminated. How did you solve the problem 14 years ago? It's simple, the US and the EU flooded the global economy with quantitative easing. They flooded it, but they did not solve the problem of imbalance. Production was transferred to Asia from Europe and the USA, where the service sector began to expand, wages did not grow, while living in debt was strongly encouraged.

At the same time, central banks continued to increase borrowing in an attempt to support their economies. By 2019, the major economies of the world had accumulated debt in the amount of more than 70% of their economies. Ahead of the rest of the planet in this list are all the same States. Now the total US debt has exceeded 30 TRILLION US dollars. That is, the "bubbles" not only remained, but also became even larger. Everyone was expecting a crisis in 2021 or 2022, but all the cards were confused by the coronavirus epidemic, which launched the process of “disintegration” of the global economy.

The system more or less remained stable until it appeared, our “anti-hero coronavirus”, which for the first time in history began to influence the global economy on such a scale, creating a problem that must be solved without using economic logic.

2. Before COVID-19

2.1 What happened in the global economy in 2019

For 12 months of 2019, the world economy has done without serious shocks, which, according to experts, has not happened for many years. Nevertheless, in 2019, global growth rates slowed down - international investors were alarmed by the intensification of trade wars and signals of a possible recession in the United States and Europe. At the same time, OPEC oil exporters jointly saved the energy market from collapse, and central banks of different countries massively reduced interest rates. So, in order to understand the situation before the pandemic and to emphasize its impact on global economy, in this chapter I will try to briefly recall the most important economic events of 2019 listed above.

US vs China

One of the key events of 2019 in the global economy was the intensification of the trade war between the United States and China (BBC, 2020)[1], which began in 2018. After a series of negotiations in May, Washington escalated the conflict: in addition to the introduction of new duties, American technology companies began to end cooperation with Huawei.

In August, the countries once again failed to agree on the terms of the trade deal and introduced new mutual restrictions in September. However, Beijing agreed to buy American agricultural products in exchange for lifting some of the sanctions on Huawei. After which the parties resumed negotiations.

Washington tried to limit Beijing's influence around the world and squeeze the maximum out of the negotiation process. China showed a more flexible negotiating position and made concessions more often. The states wanted to force the PRC to buy more American food.

In November, at that time, US President Donald Trump announced (NYTIMES, 2019)[2] his intention to conclude the first part of the trade deal in the near future, but at the same time threatened China with a new increase in duties in the event of another failure of the negotiations. The restrictions were supposed to take effect on December 15, 2019, but ultimately, they didn't.

On December 17, Trump announced the possible approval of the first stage of the deal "within a couple of weeks." However, experts called the long-awaited truce between the United States and China fragile. According to experts, China was already preparing a response to possible restrictions from Washington and was gradually ousting the United States from the most promising markets. First of all, we are talking about Africa and Latin America.

Dangerous signal

1 https://www.bbc.com/news/business-45899310
2 https://www.nytimes.com/2019/12/17/business/trump-trade-deals-free-markets.html

In 2019, players in the financial market drew attention to a sharp slowdown in the American economy. Moreover, experts saw the first signs of a possible start of a recession in the United States (CNBC, 2019)[3]. The US consumer confidence index has been declining for four consecutive months. This is the longest period of deterioration in the indicator over the past seven years. Americans are increasingly worried about the slowdown in the national economy and the possibility of intensifying the trade war between Washington and Beijing, experts say. According to them, another increase in import duties on Chinese goods will reduce purchasing activity in the United States and may push the country into recession.

In November, the US consumer confidence index fell to 125.5 points. The weakening of one of the key indicators of the economic activity of the population of the United States has continued continuously since August and has already become the longest since mid-2012. This is stated in a study by the American think tank The Conference Board.

In the spring of 2019, the yield on US government bonds with a ten-year maturity was lower than on government bonds with a maturity of three months. As a rule, such a situation occurs shortly before the onset of a recession in the economy and was last observed in 2007.

Investors recognized an alarming signal in the banking sector as well. In September, American banks did not have enough free money to meet their obligations. The Fed came to the rescue, an analogue of the central bank, which began to urgently print dollars. Previously, the regulator resorted to this measure in 2008 - during the global financial crisis.

Barrel control

Experts called 2019 one of the most successful years for the oil industry. The cost of Brent crude, despite all the sharp fluctuations in 2019, remained in the range of $ 55-70 per barrel. This price level suited producers and consumers, the expert said.

The determining factor for oil prices was the fulfillment of the OPEC + agreement. Since January, the countries - exporters of energy raw materials have reduced the production of hydrocarbons by 1.2 million barrels per day compared to October 2018. At the same time, in December, the states agreed to further reduce oil production by 500 thousand barrels per day. The actions of the participants in the transaction made it possible to balance supply and demand on the energy market, as well as to keep prices from sharp jumps.

By joint efforts, the OPEC + countries as a whole were able to withstand negative factors, for example, a slowdown in the world economy or the production of shale oil in the United States. The US sanctions against two large oil-producing countries, Iran and Venezuela, had a noticeable impact on the cost of energy. The restrictions of the

[3] https://www.cnbc.com/2019/11/26/us-consumer-confidence-for-november-comes-in-at-125point5-vs-126point6-estimate.html#:~:text=Consumer%20confidence%20dipped%20for%20a,down%20from%20126.1%20in%20October.

United States provoked a decline in the supply of raw materials in the world, and in the spring quotations briefly rose above $ 70 per barrel.

In September 2019, investor panic was sparked by a drone attack on the oil plants of the world's largest energy company, Saudi Aramco. As a result of air strikes, the production of hydrocarbons in the kingdom fell by almost half. However, in Saudi Arabia they were able to quickly restore production and thereby reassure market players.

Moreover, in December 2019, Saudi Aramco began selling shares on the stock market for the first time in its history. Investors have been waiting for this event for more than three years and from the first day of trading began to massively buy securities. Experts explain this excitement by the desire of market players to invest in the most expensive company in the world. In terms of value, Saudi Aramco has surpassed Apple, Microsoft, Alphabet (owned by Google Inc.) and Amazon.

Thunderstorm over Europe

The slowdown in world economic growth and trade wars have had the greatest impact on European countries. Eurozone GDP growth slowed to 1.2%, while industrial activity in the region weakened to a record level in the past seven years.

According to experts of the analytical agency IHS Markit, serious pressure on European manufacturers was also exerted by the contraction of the global car market and the uncertainty around Brexit. At the same time, the negative effect largely fell on the key players in the region - Italy and Germany.

In 2019, the economies of both countries at a certain point already went into recession. For example, Italian GDP declined throughout the first half of the year, while German GDP declined from April to June 2019. Several years ago we already saw Italy in a really difficult economic situation. The country was practically on the verge of default, but this did not become fatal for Europe as a whole. The dependence of most European countries on Italy is not so great. But the economic problems of Germany can lead to a crisis in the entire European Union. This is due to the fact that Germany is an obvious donor country for European states and a real economic center of the EU.

A game of manipulation

In mid-2019, global investors drew attention to the sharp criticism of the United States against Beijing and European trading partners. Donald Trump (FOX BUSINESS, 2019)[4] began to regularly accuse China and the EU of manipulating exchange rates.

From January to October 2019, the yuan and the euro weakened against the dollar by almost 4% and 5%, respectively (WSJ, 2019)[5]. As experts explain, this trend leads to an increase in the cost of American products in the markets of the EU and China, while Chinese and European goods, on the contrary, are becoming cheaper in

[4] https://www.foxbusiness.com/economy/trump-weaker-us-dollar
[5] https://www.wsj.com/articles/chinas-yuan-falls-past-key-level-of-7-to-the-dollar-11564977948?mod=article_inline

the United States. Thus, manufacturers from Europe and the Asian republic began to gain trade advantages over the United States.

In retaliation, Trump began pushing the idea of devaluing the dollar himself, and in August, the US Federal Reserve began lowering interest rates for the first time in ten years. The Fed's actions may support economic activity, but in the long term will cause the US currency to weaken. Following the Fed, the central banks of Europe, China, India, Brazil, Russia and other countries began to cut interest rates.

Cause for alarm

Since the beginning of 2019, the International Monetary Fund (IMF) has significantly worsened its forecast for global GDP growth - from 3.7% to 3% in 2019 and from 3.7% to 3.4% in 2020. Although the organization hoped for an acceleration in the global economy in 2020, experts were pessimistic. Later there were updated releases of World Economic Outlook Reports with a slight correction in their forecast, but as it turned out, they were right, however they could not even imagine what the upcoming 2020 will be like for the whole world.

2.2 What is COVID-19?

So, at the end of 2019 there were no objective prerequisites for the global economic crisis, but that year turned out to be the last pre-coronavirus year. Many international organizations and economists predicted a slowdown in global GDP growth in 2020. At that time, experts considered trade wars, geopolitical conflicts, and an increase in debt burden to be the main risks for the global economy. However, 2020 exceeded all the expectations of experts, because the coronavirus pandemic played a decisive role in unleashing the economic crisis in 2020, The global economy has faced one of the largest collapses in history as a result of the fallout from the “COVID-19”.

> *“COVID-19” also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Wikipedia, 2020).*[6]

This unprecedented shock in the form of COVID-19 pandemic caused serious socio-economic consequences, including the largest global recession since the Great Depression and massive famine, affecting about 265 million people. (UN, 2020)[7] The spread of infection has led to massive quarantine restrictions and border closures, to the postponement or cancellation of many sporting, religious, political and cultural events, and widespread supply shortages have been exacerbated by panic buying, which have resulted as the largest global GDP collapse in the last decades. In addition, the consequences of COVID-19 were remembered for the record growth in global debt, negative oil prices, a weakening dollar, as well as a sharp rise in the price of gold and cryptocurrencies, but also reduced emissions of pollutants and greenhouse gases. Schools, universities and colleges have been closed either nationally or locally in 172 countries, affecting approximately 98.5% of the world's school and student age population.

[6] https://en.wikipedia.org/wiki/COVID-19_pandemic
[7] https://www.un.org/press/en/2020/sc14164.doc.htm

The first cases of COVID-19 were recorded back in December 2019 in the Chinese city of Wuhan. In February 2020, the number of cases in China approached 80 thousand, but the introduction of strict epidemic restrictions allowed the country's authorities to stabilize the situation by March.

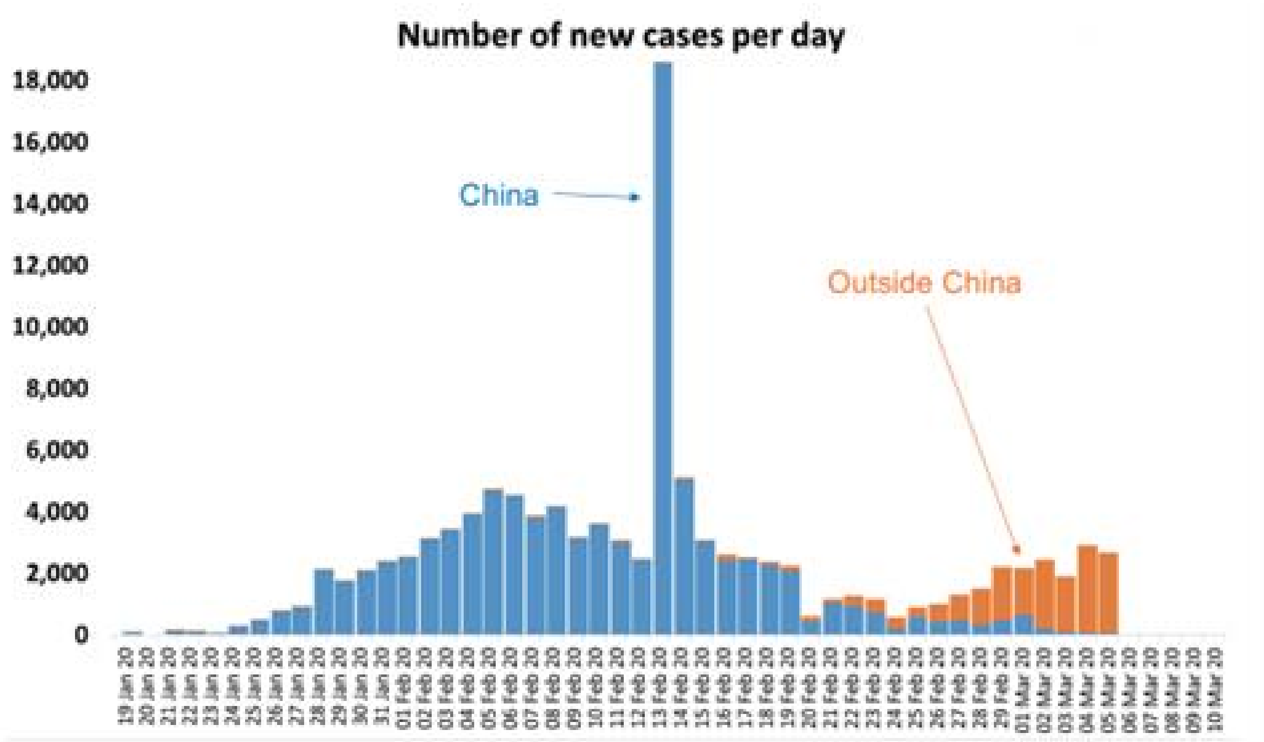

Figure 1. COVID-19 epidemiologic curve, worldwide

At the same time, the infection managed to spread outside China, and in early spring the number of cases began to grow rapidly around the world. On March 11, the World Health Organization (WHO) announced (WHO, 2020)[8] the beginning of a pandemic, after which states began to massively restrict international transport links and introduce quarantine measures. As a result, it was the lockdowns that caused the greatest economic damage. In a number of cases, it was possible to observe either a ban on conducting activities in certain industries, or a complete shutdown of the economy due to the restrictions imposed.

[8] https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

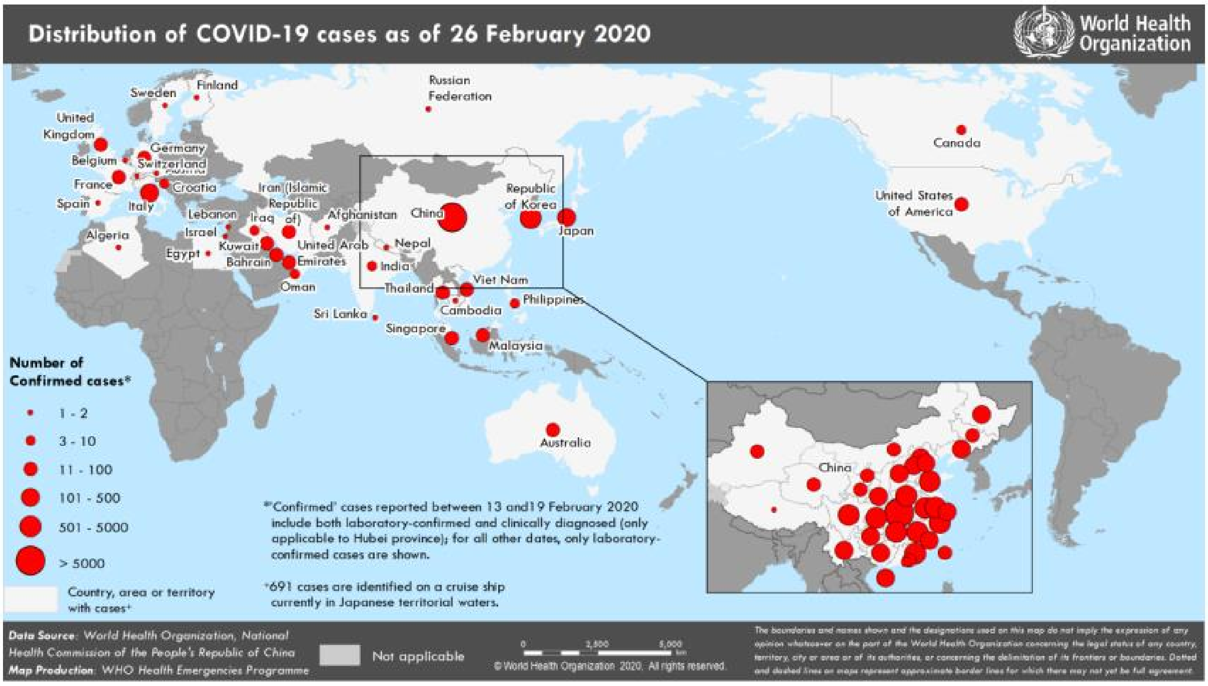

Figure 2. Countries, territories, or areas with reported confirmed cases of COVID-19, 26 February 2020[9]

As of 12nd of July 2022, more than 560 million cases have been confirmed, with more than 6.3 million confirmed deaths attributed to COVID-19, making it one of the deadliest pandemics in history.

[9] Source: WHO.int

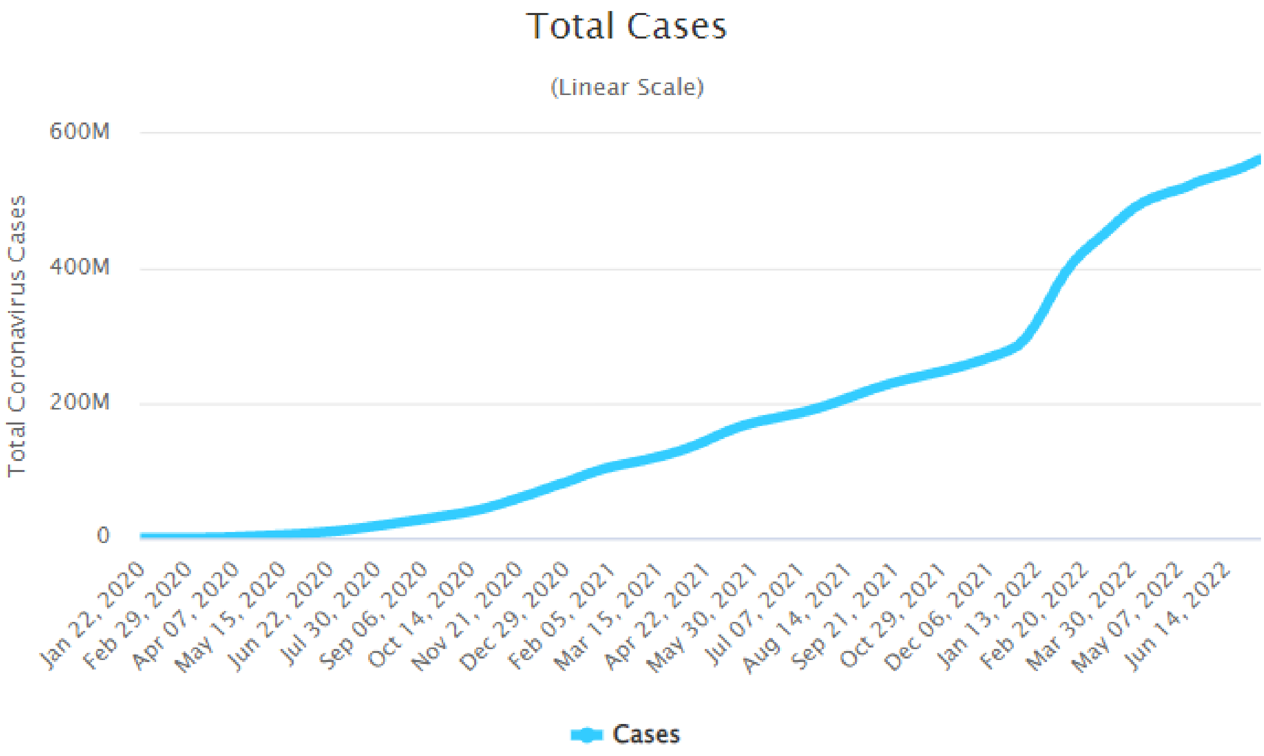

Figure 3.Total Cases as of 12nd of July 2022[10]

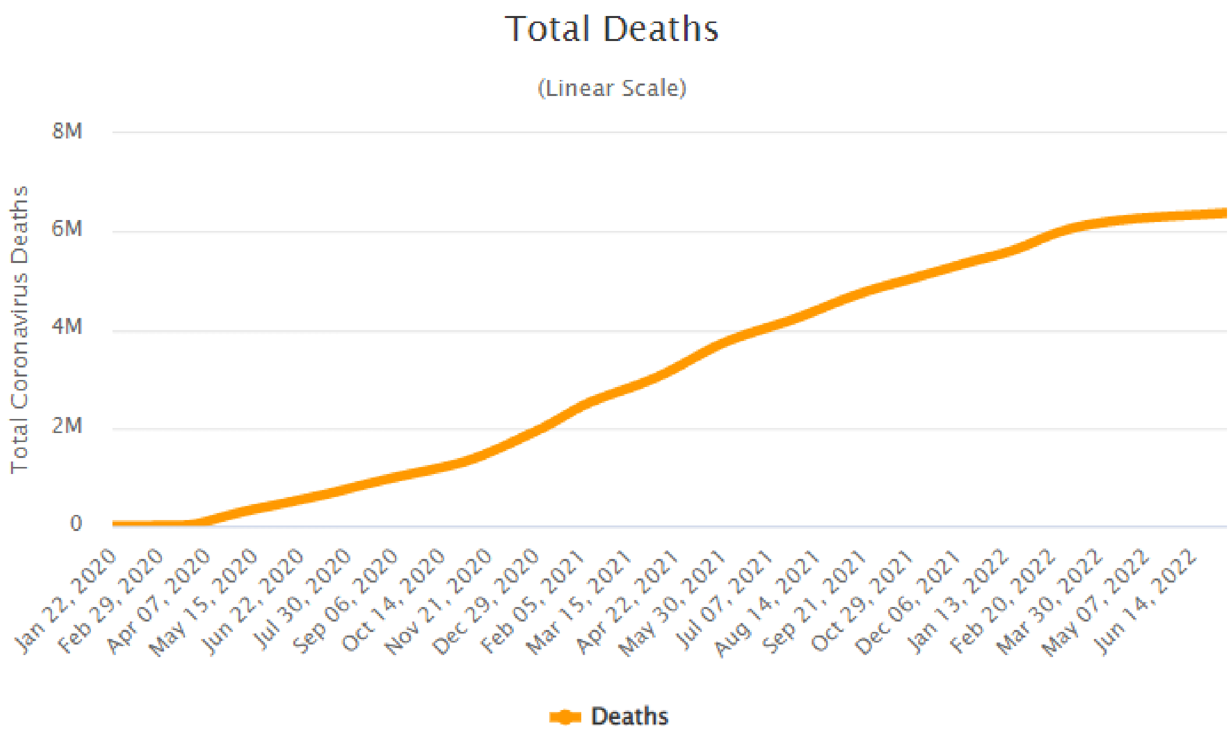

Figure 4. Total Deaths as of 12nd of July 2022 (Worldometers, 2022)[11]

[10] Source: Worldometer

[11] Source: https://www.worldometers.info/coronavirus/

3. During the pandemic period

3.1 Global effect

At the beginning, the pandemic had a local impact on the stock exchanges in China, where trading volumes began to decline from January 21, 2020. But already on January 27, against the backdrop of an increase in the number of cases, the fall affected the FTSE 100 and European exchanges. Further developments led to a global stock market crash that began on February 20, 2020. The Dow Jones Industrial Average, the S&P 500 and the NASDAQ-100 fell on February 27 in one of the worst trading weeks since the 2007-2008 financial crisis. The markets became extremely volatile over the next week, with fluctuations of 3% or more in a daily session. On March 9, all three Wall Street indexes fell more than 7%, and most global markets reported a decline in business activity, mainly in response to the oil price war between Russia and Saudi Arabia. The fall, dubbed Black Monday, was the worst fall since the Great Recession in 2008. Three days after Black Monday, there was another drop, Black Thursday, when stocks across Europe and North America fell over 9%. Wall Street saw the biggest one-day interest rate cut since Black Monday in 1987, and the FTSE Mors of Borsa Italiana index fell over 17%, becoming the worst-hit market during Black Thursday.

However, by the beginning of 2021, the stock market recovered and continued to grow, supported by the money issue.

The crisis led to large-scale money printing in a number of countries, and the global debt of corporations and governments exceeded 350% of world GDP. This, in turn, increases inflationary risks and raises fears of stagflation.

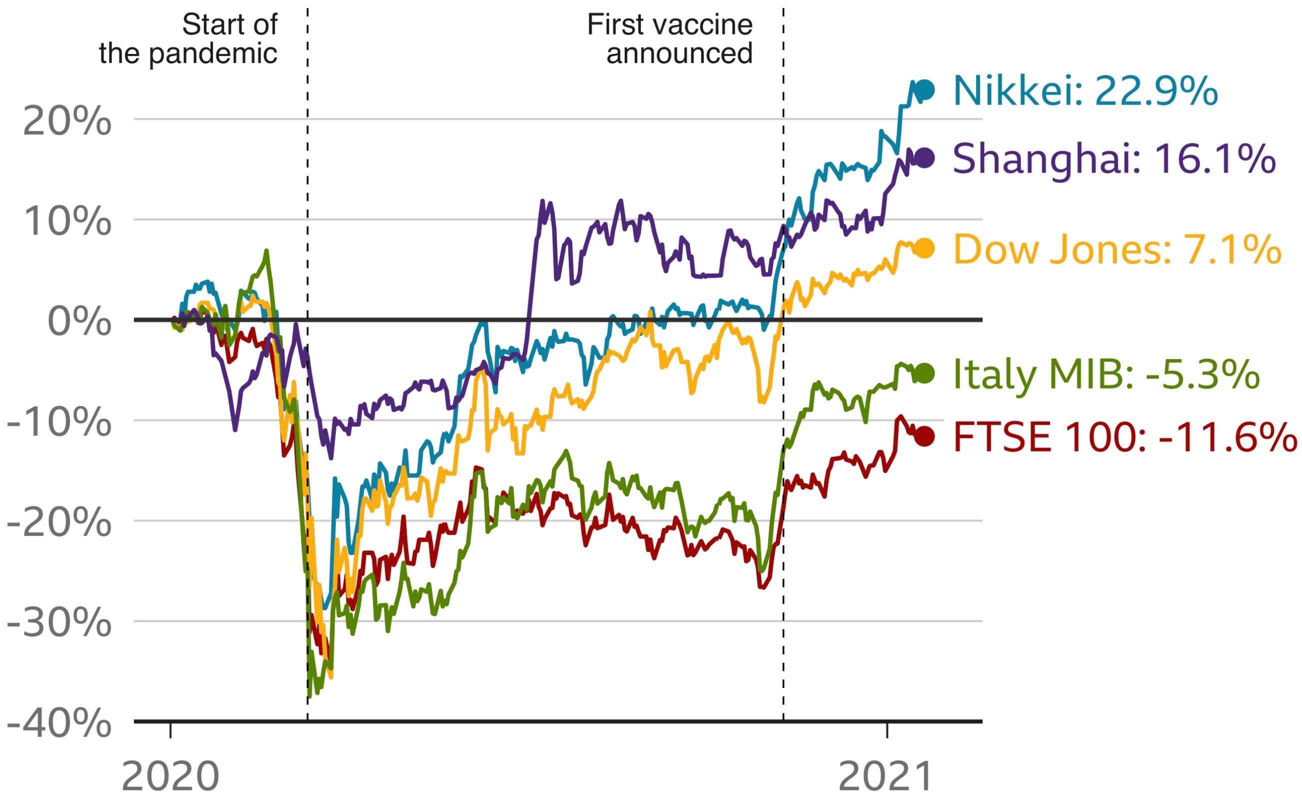

Figure 5. The impact of coronavirus on stock markets since the start of the outbreak (BBC, 2021)[12]

As of August 1, 2020, there were 6 million confirmed active cases of COVID-19 worldwide. This pandemic has hit not only the health of people, but also the economies of countries. Many audit bodies have been given the responsibility of monitoring how effectively governments spend their money in challenging times and what results this brings.

The pandemic directly led to the closure of enterprises in countries with a high percentage of cases, a sharp increase in demand for everyday products, speculation in the market for certain goods: antiviral drugs, sanitary masks, disinfectants. Quarantine measures in China and some other producing countries have led to supply disruptions, most affecting electronics and container shipping.

It was the lockdowns that caused the greatest economic damage. In some cases it was possible to observe a ban on conducting activities in certain industries, or a complete shutdown of the economy because of the restrictions entered.

GDP

The pandemic has caused the greatest damage to countries whose economies are mainly based on small business and services. So, in the second quarter, the GDP of the EU countries fell by 11.4% compared to the same period in 2019 (according to an estimate published by Eurostat, the statistical office of the European Union) (Eurostat,

[12] https://www.bbc.com/news/business-51706225

2020)[13], the UK - by 19.8%, and the US - by 31.4%. The drop in indicators has become the largest over the entire period of observations.

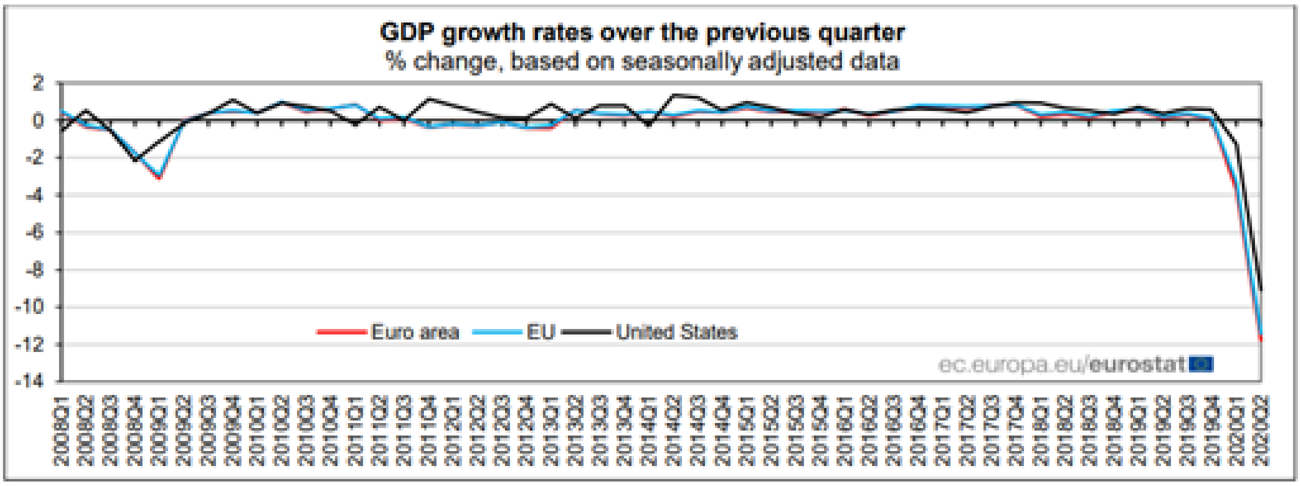

Figure 6. GDP growth rates over the previous quarter (% change, based on seasonally adjusted data)[14]

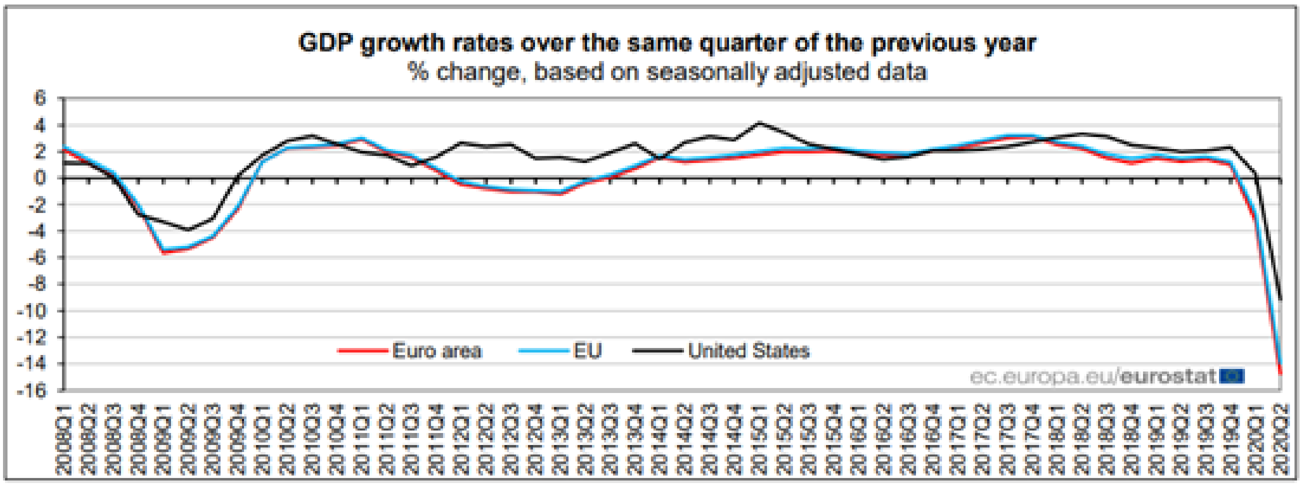

Figure 7. GDP growth rates over the same quarter of the previous year (% change, based on seasonally adjusted data)[15]

According to the estimates of the international investment bank JP Morgan and the analytical agency IHS Markit, in April the level of business activity in the world dropped to a minimum since the financial crisis of 2008-2009. In May, the figure began to rise moderately as the pandemic weakened and the restrictions were partially lifted in several countries. Meanwhile, the recovery in activity slowed in the fall due to the onset of the second wave of COVID-19.

Unemployment

[13] https://ec.europa.eu/eurostat/documents/2995521/10545471/2-08092020-AP-EN.pdf/43764613-3547-2e40-7a24-d20c30a20f64#:~:text=Compared%20with%20the%20same%20quarter,time%20series%20started%20in%201995.

[14] Source: Eurostat

[15] Source: Eurostat

Covid-19 continues to hit jobs around the world hard, the United Nations said, warning it could take years for employment levels to recover. In a new study (ILO, 2022)[16], the UN has revised up its previous forecast that the global labor market will almost fully recover from the pandemic this year. In 2022, the number of unemployed in the world will rise to 207 million, which is 21 million more than in the pre-crisis 2019. This is stated in the new report of the International Labor Organization (ILO). The global unemployment rate is expected to remain above pre-pandemic levels until at least 2023," the authors of the new report say.

The ILO notes that earlier, more optimistic forecasts for a labor market recovery have not materialized due to the impact of the spread of recent variants of COVID-19, such as Delta and Omicron, as well as uncertainty about how the virus will behave in the future.

Global unemployment is expected to remain above pre-crisis levels until at least the end of 2023. "The crisis has been going on for two years now, but the outlook remains uncertain and the recovery remains sluggish and fragile," said ILO Director-General Guy Ryder.

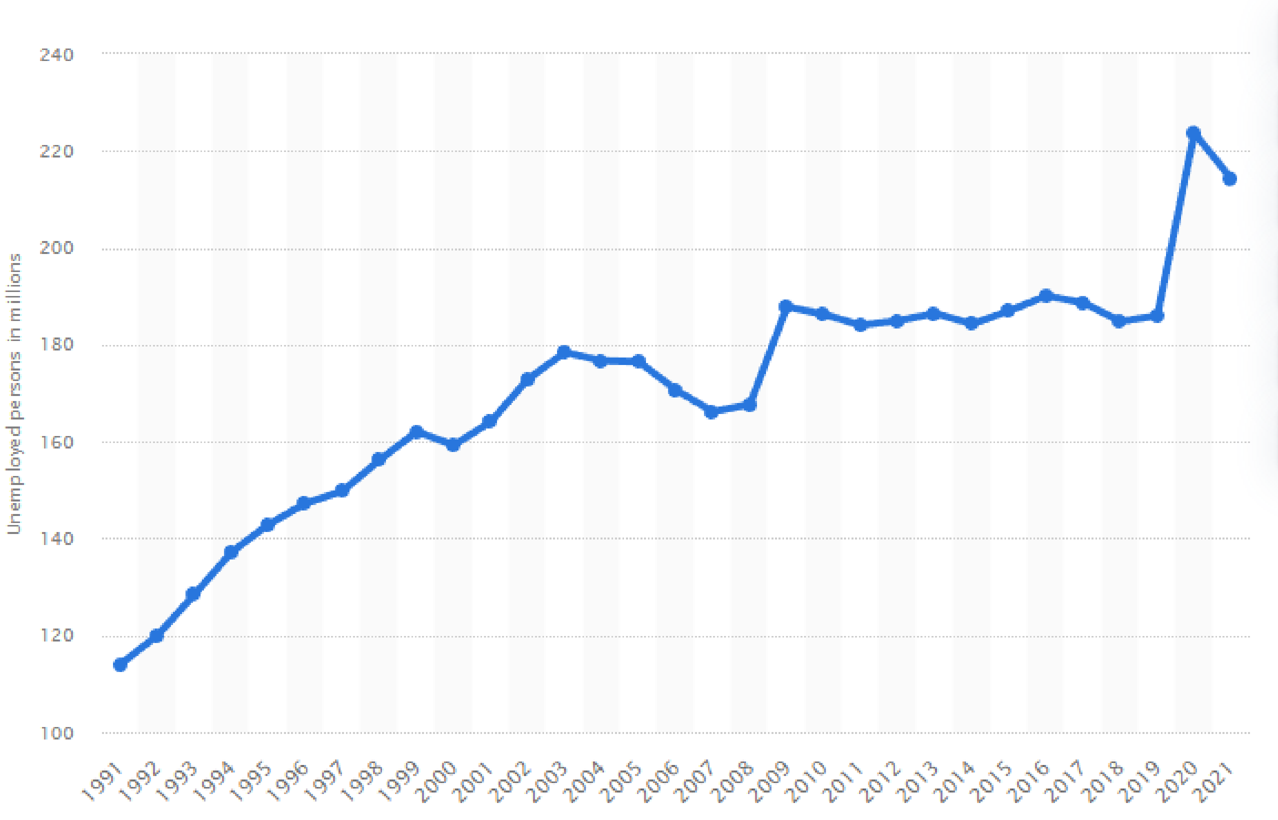

Figure 8. Number of unemployed persons worldwide from 1991 to 2021 (in millions) (Statista, 2022)[17]

[16] https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_834117/lang--en/index.htm

[17] https://www.statista.com/statistics/266414/unemployed-persons-worldwide/#:~:text=Between%202019%20and%202020%2C%20the,slightly%20to%20almost%20214.21%20million.

He fears that the damage to labor markets from the pandemic could become irreversible. Today, there is an alarming rise in poverty and inequality. Many workers have to switch to new forms of work - for example, a protracted decline in international tourism is forcing them to do so.

The effects of the pandemic on labor markets are being felt in every region of the world, although the pace of recovery varies from place to place. The most encouraging signs of a resurgence are in Europe and North America, while the least encouraging are in Southeast Asia, Latin America and the Caribbean.

The disproportionate impact of the pandemic has been on women's employment and will be felt over the coming years. The closure of educational and vocational institutions will have severe long-term consequences for young people.

“Without a comprehensive recovery of the labor market, the consequences of the pandemic cannot be fully overcome,” the head of the ILO stressed. According to him, a sustainable recovery can only be achieved on the basis of the principles of decent work, including labor protection, equality, social protection and social dialogue.

The report contains comprehensive job market projections for 2022 and 2023. It assesses the progress of the recovery of the labor market in the world, describes the approaches of different countries to the issue of recovery from the pandemic, analyzes its consequences for various categories of workers and sectors of the economy.

Experts note that in some cases, as in previous crises, temporary employment plays the role of a kind of shock absorber in a pandemic. During the crisis, many temporary jobs were closed, but at the same time others were created, including for those who lost their permanent jobs. On average, the number of temporary workers remained unchanged.

The Global Employment and Social Protection Outlook report makes recommendations to ensure an inclusive and people-centred recovery from the crisis, both nationally and internationally.

Inflation

The coronavirus vaccine did not save the global economy from the imbalances caused by the lockdown and the world inflation is getting higher and higher. The fall in household incomes, the growth of public debt and inflation, and the public's investment in high-risk assets pose new challenges for the financial authorities of both developed and developing countries. The recovery from the worst crisis in a century is uneven, causing companies around the world to panic and restock hysterically. Soaring demand and resulting shortages are pushing prices to peak levels for literally everything from food to semiconductors and metals. The prospects for a return to the usual economic course are not visible yet.

The uneven economic recovery has led to an uncontrolled rise in inflation around the world. Since the early 1990s, the world economy has experienced only three comparable increases in food prices. The last time this happened

(FAO, 2022)[18] was in 2010-2011 and was accompanied by a series of uprisings and protests in the Middle East, dubbed the "Arab Spring". The rapid acceleration of inflation in food markets promises the world a wave of social upheaval, especially in weak economies.

According to the forecast under the baseline scenario, the global inflation will reach 7.9% in 2022, in the US and the UK to 7.5%, China to 2.7%. Inflation risks in the Eurozone will be still high as the result of energy prices and obviously the countries with the higher energy dependence (Germany, Italy, Spain) will have the sharper increase in 2022.

Figure 9. Global Commodity Price Indices, 2020-2022 (Euromonitor, 2022)[19]

[18] https://www.fao.org/worldfoodsituation/foodpricesindex/en/

[19] https://www.euromonitor.com/article/global-inflation-tracker-q2-2022-energy-dependent-countries-under-pressure#:~:text=Under%20the%20baseline%20scenario%2C%20global,higher%20inflationary%20effects%20in%202022.

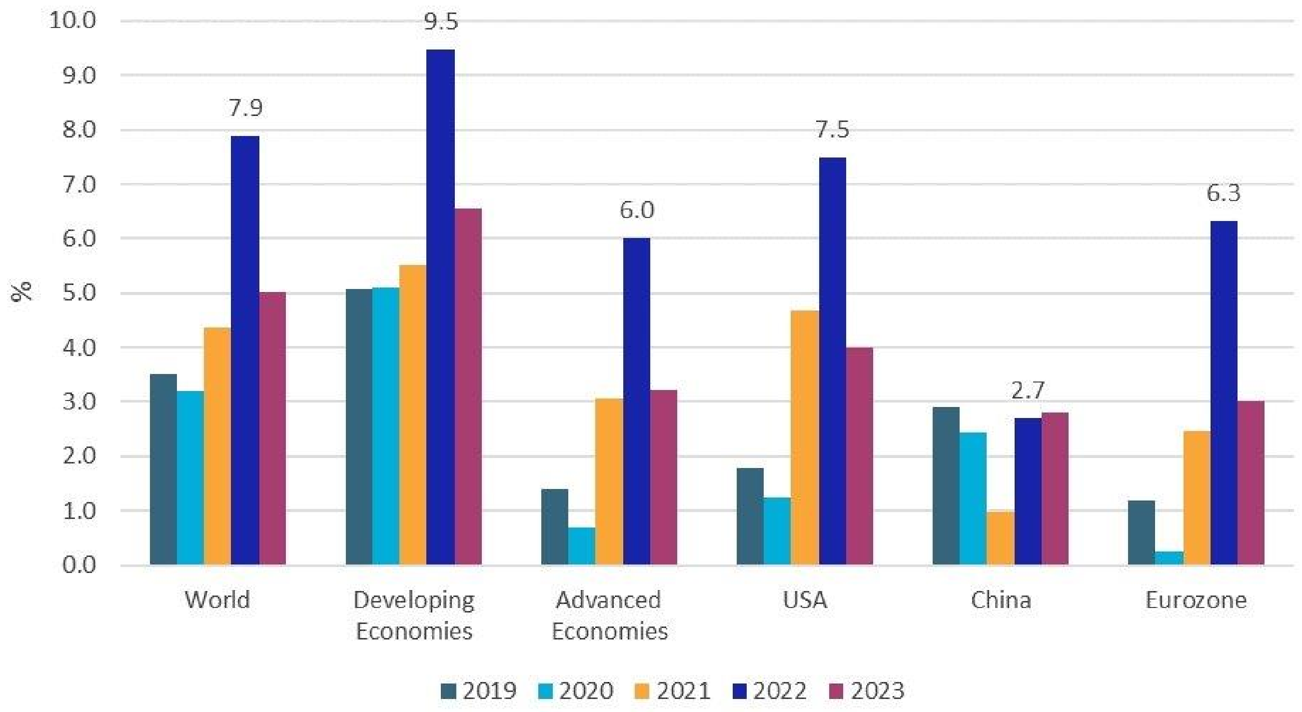

Figure 10. Global Inflation Baseline Forecast, 2019-2023 (Statista, 2022)[20]

While the world economy is not ready to return to its usual tracks, vaccination has not solved all the problems caused by the pandemic, which means that turbulence continues. Inflation will be a major headache for central banks around the world. Regulators will have to maneuver between economic stimulus and rising prices, but it is still impossible to predict how long this balance will have to be maintained.

Exceeding the limit: how the growth of global debt can threaten the global economy

Global debt is the total debt owed by individuals, companies, financial institutions, and governments in all countries. According to experts, the growth of the indicator noticeably accelerated in the spring of 2020 due to the measures taken by a number of states to combat the COVID-19 pandemic.

This crisis was based not on economic reasons, but on the forced need to introduce quarantine restrictions. Feeling their responsibility, countries began to allocate large amounts of money to support the population and entrepreneurs. As a result, we saw the highest growth rate of government and business debt since World War II. According to the International Monetary Fund (IMF), as a result of the pandemic in 2020, the volume of world GDP decreased by 3.3%. According to the organization, in 2022 the global economy will recover and grow by 3.6%. (IMF, 2022)[21]

The ratio of the volume of world debt to global GDP reached its highest point ever on record and it's 3.6 times the size of the global economy. Over the past years, the corresponding amount has increased by almost $ 40 trillion and is now more than $ 300 trillion for the first time. The surveyed experts associate the sharp increase in

[20] https://www.statista.com/statistics/256598/global-inflation-rate-compared-to-previous-year/
[21] https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022

borrowing with the coronavirus pandemic. So, in 2020, states had to increase spending to combat the consequences of COVID-19. At the same time, against the backdrop of economic recovery, people, businesses, and governments continue to actively take out loans in an environment of low interest rates. According to experts, this situation risks turning into the beginning of a large-scale debt crisis already in 2023-2024.

However, the world debt will continue to increase in the foreseeable future, experts say. It is profitable for governments, businesses and people to borrow money in conditions of low interest rates on loans. In general, we see that a long-term trend towards an increase in world debt in monetary terms prevails now. What can be expected at best is only a stabilization of the global debt-to-GDP ratio.

According to IIF, by the beginning of April 2020, the total debt of developed countries was about $ 202.5 trillion. It is noteworthy that the figure is almost three times higher than the value of developing countries - $ 86.2 trillion. Note that among developed countries, the USA, South Korea, Japan, Great Britain, and the states of the eurozone are experiencing the heaviest debt burden. So, in the United States, the total debt exceeds 133% of the country's GDP. In Japan, the value is about 257% of GDP, in the UK - 109%, and in China - 69%.

Among the developed countries, some European countries remain the most vulnerable to the debt crisis. So, according to Eurostat, at the moment the ratio of public debt to GDP in Greece is 205.6%, in Italy - 155.8%, and in Spain and France - 120 and 115.7%, respectively. The countries of the eurozone have been avoiding the debt crisis for many years and retain access to cheap borrowing only with the help of the ECB. The regulator keeps the rate at a zero level, prints money and with this money buys out bonds of the eurozone states within the framework of quantitative easing programs. In order to prevent the debt crisis of the entire monetary union, the European central bank will be forced to continue support in one form or another.

According to experts, a significant increase in debt increases the financial vulnerability of states. In these conditions, the likelihood of debt crises in a number of regions of the world increases. As the global economy recovers from the effects of the pandemic, world central banks will have to raise interest rates again. Against this background, the availability of new loans will begin to decline, and as a result, it will become more difficult to obtain money to repay previous loans.

"Since 1990, almost all the crises began after the start of rate increase by the US Federal Reserve. The US Federal Reserve and the European Central Bank (ECB) are projected to start raising rates around 2022. It will take several years for the increase process itself, and we can see the debt crisis in the perspective of 2023-2024 ” - the experts suggested.

Developing countries with unstable economies and a high level of credit burden will be primarily affected by the new recession. Debt crises have already happened in 2018 in Argentina, Turkey and Lebanon. Concerns are also caused by the growth of debt in African countries. The consequences may be as follows: the population of countries facing the crisis will see a strong devaluation of national currencies and a jump in inflation. Investors will face the write-off of part of their investments in debt obligations - government bonds. For other countries, foreign lending markets may temporarily close

The question arises, how to stop the buildup of debt? One of the tools is to increase the rates. The bond market demonstrates that market participants expect a rate hike by the end of 2022, while US annual inflation could reach 3.1% (University of Michigan survey (UMICH, 2022)[22]). In their opinion, in the short term, an increase in rates is not possible - this could lead to a sale of low-yield bonds and bring down the stock markets, where signs of a bubble are clearly visible. A more likely scenario would be lending at negative real rates for several more years, similar to the situation in the EU, and only after the economic recovery will there be attempts to establish a neutral rate. During this period, regulatory pressure to purchase such debt is likely to intensify.

[22] http://www.sca.isr.umich.edu/files/tbypx1px5.pdf

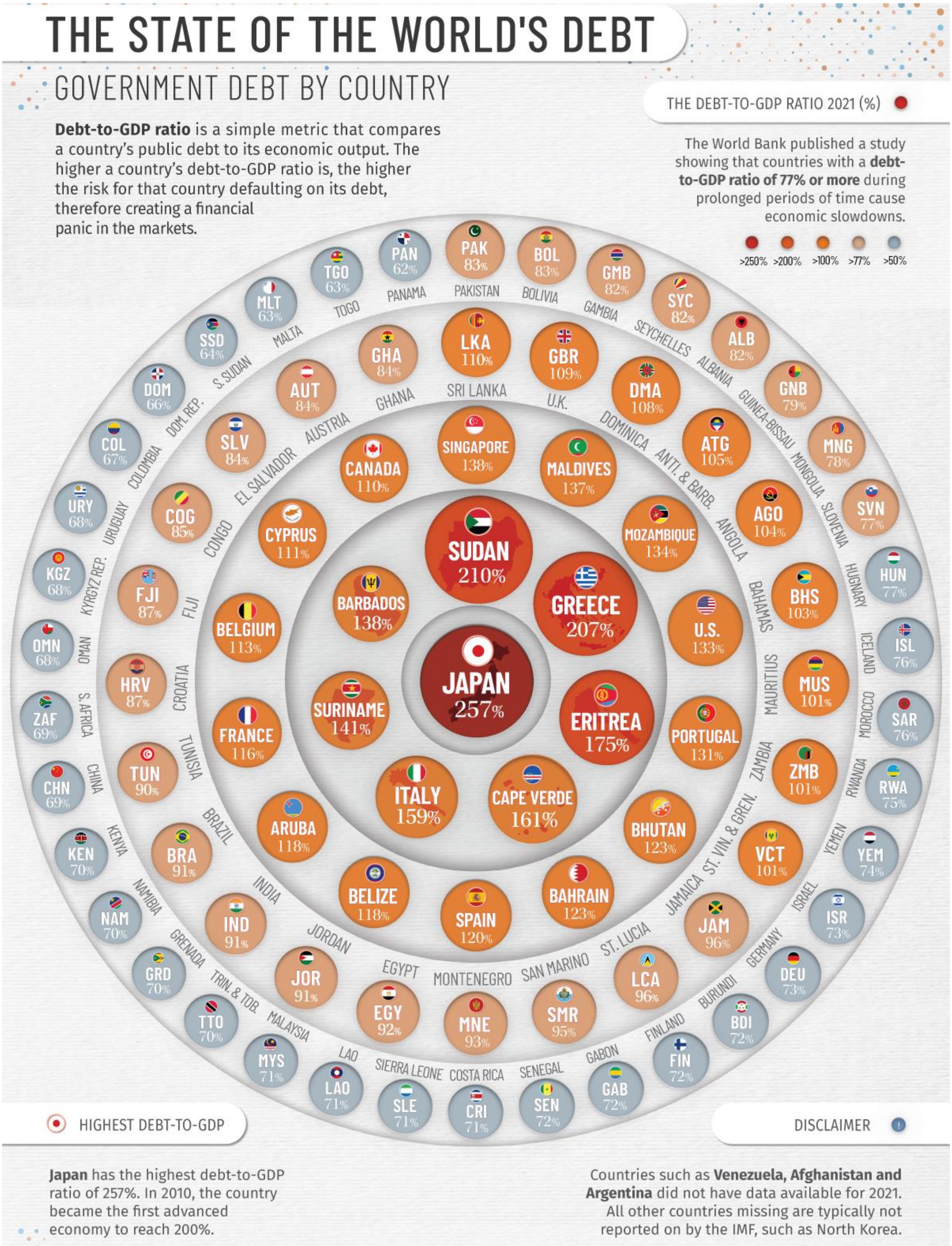

Figure 11. Visualizing the State of Global Debt, by Country

(Visual Capitalist, 2022)[23]

[23] https://www.visualcapitalist.com/global-debt-to-gdp-ratio/

3.2 Impact on industries

Oil storm

Experts call the year 2020 one of the most difficult for the oil industry. So, even before the start of the pandemic, participants in the commodity market were seriously alarmed by a sharp exacerbation of relations between Iran and the United States. As a result, world investors began to fear possible interruptions in oil supplies from the Middle East, and prices for raw materials rose sharply - from $ 65-66 to $ 71-72 per barrel.

However, as the coronavirus spreads in the world, the introduction of lockdowns and the closure of borders, global fuel consumption began to decline rapidly. Against this background, at the end of February, the price of Brent crude oil fell below the psychological mark of $ 50 per barrel.

The closure of countries and tough quarantine measures, first in Asia and later in the West, interrupted global production and supply chains. Oil demand collapsed, which led to a drop in prices.

As expected, the countries participating in the OPEC + oil production freeze transaction should have further reduced the production of raw materials and thereby stabilized the market situation. However, March 2020 at the end of the meeting the parties could not agree and decided to completely abandon all commitments made earlier.

The collapse of the OPEC + deal triggered the largest price shock in the history of the oil market. The increase in production by exporting countries and the ongoing collapse in global demand have led to an almost full load of the world's oil storage facilities. As a result, it became physically impossible to carry out new supplies of raw materials.

The situation turned into the fact that in the middle of spring the price of Brent oil fell to a minimum in 21 years and at that moment fell below $ 16 per barrel. In turn, the cost of raw materials of the American grade WTI for the first time during the entire period of trading fell to negative values. So, on April 20, the contract for the supply of this brand of oil fell immediately by 300% - from $ 18 to minus $ 37.6 per barrel. Thus, producers were willing to pay buyers themselves for the supply of their raw materials.

Figure 12. Brent crude price [24]

[24] Source: Bloomberg

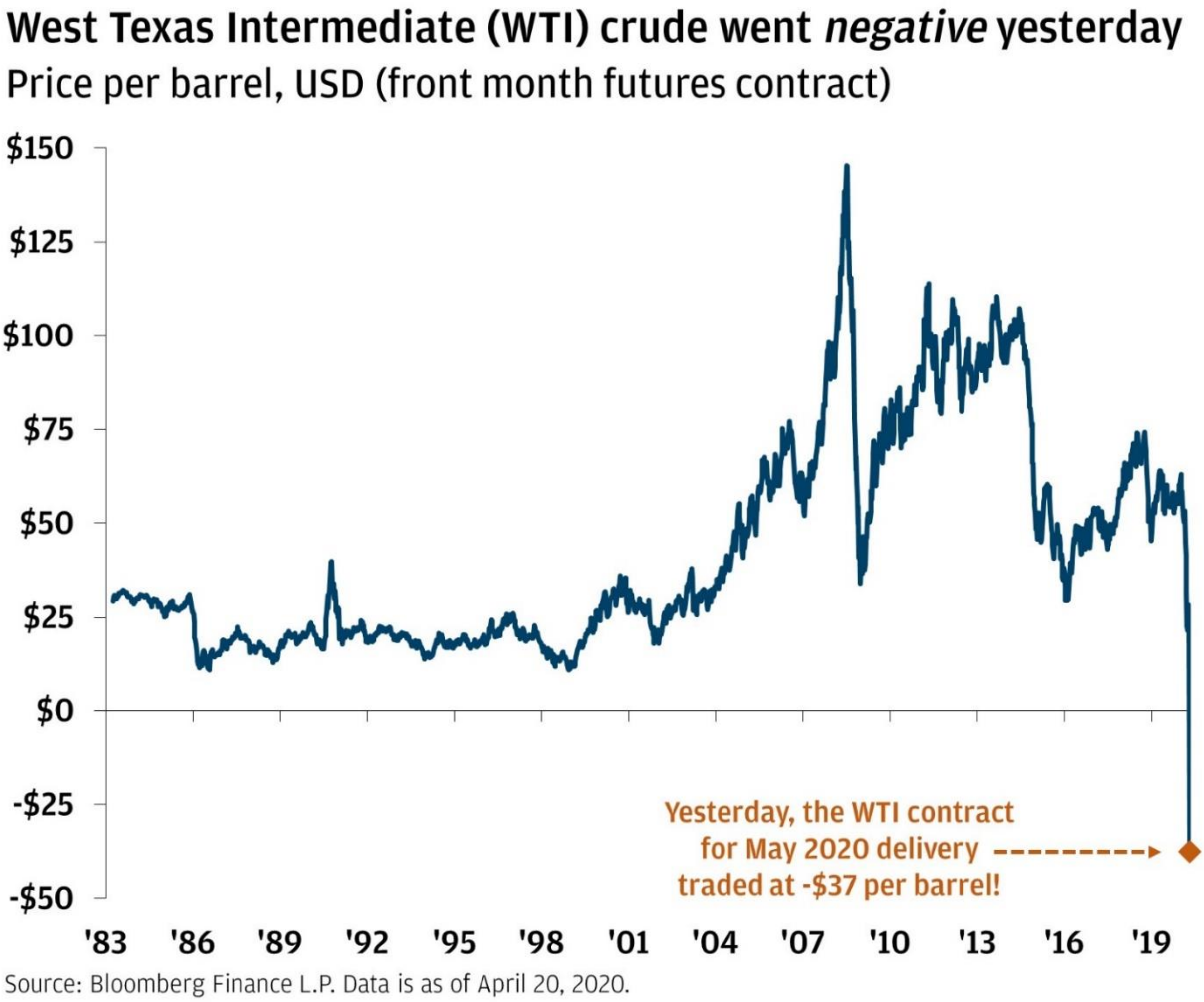

Figure 13. WTI crude price[25]

The collapse of the oil market forced exporters of raw materials to return to the negotiating table and resume cooperation. On May 1, OPEC + members again began to reduce oil production, and the demand for energy resources began to gradually recover as quarantine restrictions were lifted in a number of states. As a result, in early June, the price of Brent rose above $ 40 per barrel, and exceeded $ 50 in December.

The recovery in oil prices was due to the "vaccine race". In late November - early December, the market reacted extremely optimistically to messages about the registration of drugs for coronavirus and the start of vaccination in different countries. Vaccinations are expected to bring the pandemic to an end and, therefore, restore supply chains and fuel demand.

The worldwide supply chain

Against the backdrop of the pandemic, many countries are faced with a new disaster - panic purchases from citizens frightened by the prospect of shortages. The global economy has also been affected by the number of people who are afraid of the coronavirus COVID-19 than the number of cases. Fear has changed the behavior of

[25] Source: Bloomberg

people and it changes the behavior of those who make decisions. Fear of the virus has changed the supply and demand in the global economy.

The supply was affected by the suspension of production in China, which also reduced global production. China's share in the global manufacturing industry is about 25%. In 2003, when SARS was rampant, this figure in China was only 11%. China is undoubtedly the most important link in global supply chains today. The country is also the main and in some areas the only producer of certain resources. About 1/8 of the world's exports go to China. So the production shutdown in the PRC has reduced economic activity in the world and also affected the productivity of other companies in the supply chain.

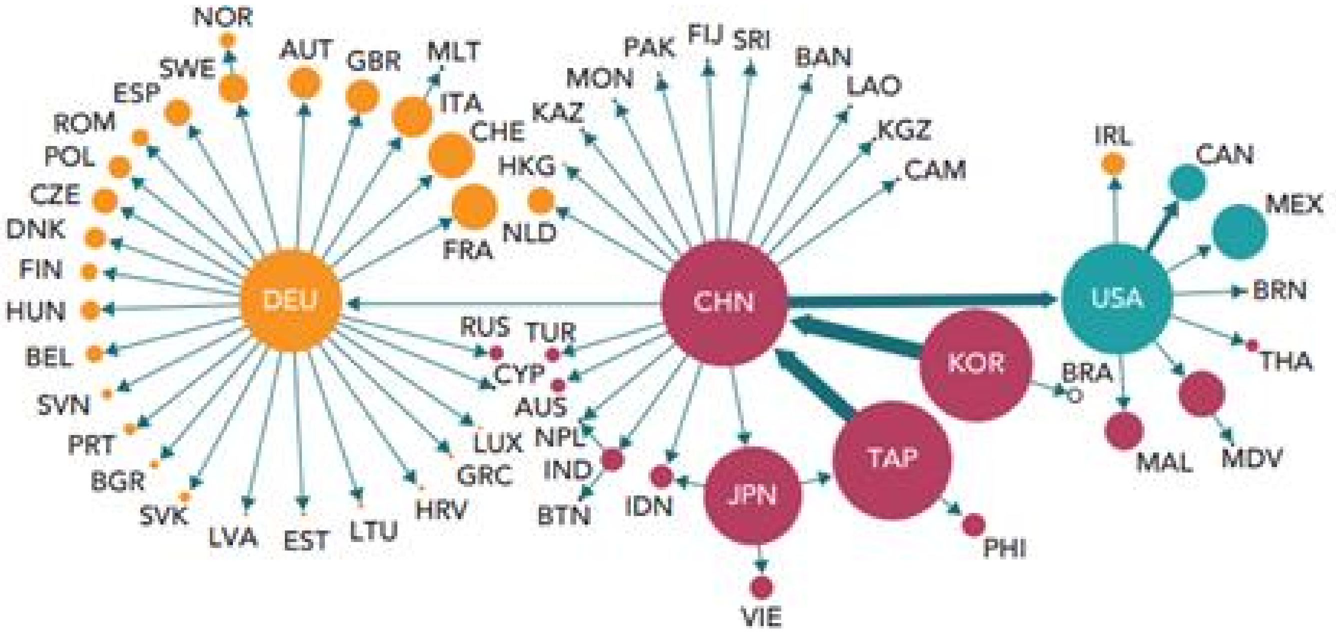

Figure 14. Three interconnected hubs in the world's supply chain for ICT goods[26]

This dependence has forced multinationals to rethink ways to improve the sustainability of their supply chains, with emphasis on creation of reserves. Consistently to reduce trade with China and diversify production centers, moreover, to establish mutually beneficial relationships with domestic suppliers.

And how about the demand? Fear has lowered the demand for certain services. People stopped going to shopping malls, cinemas, etc. The demand for travel has dropped worldwide. At the same time, online commerce has reached another level, the demand for online computer games has also grown year on year. People who are at home with their families all the time need to be distracted by something. The online economy is a great distraction. This is one of the key differences between the current situation and the times of SARS. The rise of online shopping has helped reduce the impact of the epidemic on demand. The effect is still negative overall, but weaker than in the past thanks to Amazon, Netflix and online gaming.

[26] (Source: Global Value Chain Development Report, 2019, www.WTO.org)

The impact on demand of a particular company depends on what it trades. Luxury brands are suffering. Such goods are bought in person, not on the Internet. This is "shopping as a vacation." Going to a luxury store is part of the pleasure of shopping. But for basic products, the move to online shopping could be a long-term trend.

For emerging markets, the effect of the coronavirus is to reduce the demand for resources. Reduced demand for raw materials such as copper could win back losses as production resumes. This "accumulated" demand will support prices in the future. But with energy resources, everything is not so simple. The canceled flight will remain canceled. China is a large and not very efficient consumer of raw materials. A decrease in China's GDP by $ 1 per capita has a more severe impact on global resource demand than, for example, a similar decline in UK GDP.

Panic buying

In terms of consumer panic behavior, the example of retailers can tell us a lot. Supermarkets urged prudence among customers, but not always successfully. "No more than four in one hand!" - this phrase could be seen in most British stores. Their owners, like their colleagues in many European and North American networks, have to go to previously unthinkable measures for the normal operation of their logistics systems.

The reason for this was the unprecedented activity of buyers, who, against the background of the spread of the new coronavirus and the total or partial quarantine announced in many countries, sweep almost any durable goods from the shelves - toilet paper and paper towels, household chemicals and personal hygiene products, including disinfecting gels for hands, canned food, milk and drinking water. A quarter of the store's shelves were empty before England quarantined.

British retail chains had to admonish the shoppers who had dispersed from fear together. A retailer consortium of leading retailers including Tesco, Sainsbury's and Asda issued an open letter reassuring shoppers that staff are “working around the clock to keep the country from going hungry” during the pandemic. “But we also need your help: we ask everyone to pay more attention to shopping. We understand your concerns, but buying something in excess, you leave someone else without the right product. If we act together, it will be enough for everyone” – “The Independent” quotes the message. (Independent , 2020)[27]

France has also faced an increased demand for some goods, which, along with Italy, has become one of the most serious foci of infection in Europe. From the shelves of supermarkets, pasta, beloved by the residents of the republic, disappeared, as well as rice, oil and hygiene products: toilet paper and baby diapers. In early March 2020, sales of pasta rose by almost 60%, flour by 25%, and rice by 20%.

This phenomenon was noted “everywhere in France, and not only in areas where cases of human infection have been reported,” said a spokesman for the Auchan brand. At the same time, he assured that buyers should not be afraid of a deficit.

[27] https://www.independent.co.uk/news/uk/home-news/coronavirus-update-stockpiling-supermarkets-asda-tesco-sainsburys-uk-a9402716.html

Responding to the queues in stores, Finance Minister Bruno Le Maire said that "the security of food and essential goods supplies in France is guaranteed today, it will be guaranteed in the coming weeks, and there will be no shortage."

In Germany, the situation was also unpleasant - there seemed to be enough food for everyone, but it was not always the case for employees of retail chains to arrange goods on the shelves in a timely manner. Against this background, the second largest retailer in the country, REWE, turned to everyone who could come to work on a temporary basis for help so that the shelves in stores did not look empty. In particular, according to Reuters (Reuters, 2020)[28], the network addressed such an appeal to students - universities in Germany were still closed, and students will clearly not be hurt by a part-time job. The German retail trade association HDE assured that there would be no restrictions on the opening hours of stores, although it recognized that "temporary interruptions" in the supply of certain goods cannot be avoided.

Panic purchases, provoked, among other things, by the actions of the media, "snatching out" the «tastiest» fragments of scenes in stores, are also recorded in the United States. However, another interesting trend has emerged in North America - fearing social cataclysms due to the coronavirus, residents actively stocked up on weapons and ammunition.

Judging by data from retailers, pistols and rifles are most actively dismantled in the states where the most cases of infection, including fatal ones, are California, New York and Washington. “But the growth in demand is also recorded in other, less affected areas, where people who buy weapons for the first-time fear disturbance of order, and gun owners are concerned that the government, introducing emergency measures, could restrict the purchase of weapons,” reported The Los Angeles Times. (LATIMES, 2020)[29]

Psychologists classify consumer behavior, which most often becomes the true cause of real or perceived hype, as panic buying. “When you lose your subjective sense of control, you start buying things to try and solve the problems that led to your initial loss of control,” said Andy Yap (assistant professor of organizational behavior at INSEAD Business School in Singapore) in an interview with Deutsche Welle (DW, 2020)[30]. “In other words, when you’re alarmed about a virus, you’ll start shopping for items that could potentially prevent infection or make your surroundings cleaner. As a result, people buy masks, hand sanitizers, detergents to keep the office and home clean, and so on.”

"Panic buying" of goods that are designed to protect against COVID-19, including due to the fact that the coronavirus is an "invisible enemy". “And when you don't see the enemy, you lose your sense of control,” Yap said – “In such a situation, you are trying to do something to compensate for this loss and regain control. Buying certain things is one way to do it.”

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[28] https://www.reuters.com/article/us-healthcare-coronavirus-retail-germany/feed-the-hamster-german-retailer-asks-students-to-restock-shelves-idUSKBN2131UM

[29] https://www.latimes.com/world-nation/story/2020-03-15/coronavirus-pandemic-gun-sales-surge-us-california

[30] https://www.dw.com/en/coronavirus-the-psychology-behind-panic-buying/a-52721736

However, in order to feel safe, people, even those under stress, are not inclined to spend too much money. “We want a sense of control on a tight budget,” says Farasat Bukhari, a health economics specialist at the British University of East Anglia. "We buy something cheap that we can store, knowing that over time we will still use it."

Global semiconductor shortage

The global chip shortage is in its third year of crisis, with demand for integrated circuits exceeding supply by 10-30% and this crisis can be explained by a combination of factors. It should be noted that the crisis has affected more than 169 industries (Yahoo Finance, 2021)[31] - from the automotive industry to video games, consumer electronics and electrical devices in general, and also has a noticeable impact on the telecommunications industry and medicine, since many devices and equipment are based on modern digital technologies. (The Guardian, 2021)[32] In addition to being used in mobile phones and handheld devices, semiconductor chips are essential for the internet, passive infrastructure, IoT sensors, routers, wireless communications, and every other industry in between.

Among the causes of the crisis is the COVID-19 pandemic, which has led to an increase in demand for computers, consumer electronics and medical equipment. In addition, fires at the end of October 2020 at the Asahi Kasei Microsystems (AKM) audio chip factory and on March 19, 2021 at the Renesas Electronics factory affected the production of microcircuits for the automotive industry.

Climate also influences production volumes. In May 2021, there were fears that the situation with the production of chips will be exacerbated by the environmental crisis in Taiwan, where factories could be left without water. The island suffered from the worst drought in 56 years due to record low rainfall in April-May 2021. As a result, in May, the water tanks of TSMC factories were only 11-23% full. Throughout June 2021, it rained heavily in Taiwan (Bloomberg, 2021)[33], threatening flooding. And in Texas in February 2021, heavy snowfalls occurred, which led to rolling blackouts, including at Samsung's Austin factories and at two factories of the Dutch NXP.

In the Asia-Pacific region, of the top six places in terms of total semiconductor supply revenues, four are occupied by the "big four" - China, Japan, South Korea and Taiwan. The same region is the world's largest market: it accounts for 60% of global semiconductor sales, of which China accounts for more than 30%. Huawei, which supplied chips to US chip makers, has been blacklisted by the US government. According to analytics consulting firm GlobalData, the US produces only about 10% of the chips used.[34]

One of the serious and ever-increasing factors is the growth of the cryptocurrency mining sector, which consumes a significant number of high-performance processors and video cards. On the other hand, the shortage of chips is slowing down the growth of mining capacity, which by 2021 already consumes more than 121 TWh per year of electricity produced in the world, which exceeds the consumption of electricity by countries such as Saudi Arabia

[31] https://finance.yahoo.com/news/these-industries-are-hit-hardest-by-the-global-chip-shortage-122854251.html
[32] https://www.theguardian.com/business/2021/mar/21/global-shortage-in-computer-chips-reaches-crisis-point
[33] https://www.bloomberg.com/news/articles/2021-06-22/flood-risk-replaces-drought-as-rains-fill-taiwan-reservoirs
[34] https://techwireasia.com/

or Norway. The consumption of resources by miners is already attracting the attention of the Chinese government, which houses 2/3 of the mining capacity, consuming cheap electricity generated by Chinese coal-fired thermal power plants.

The chip shortage has prompted automakers around the world to cut car production, but has also boosted profits as car prices have risen. General Motors said U.S. car sales fell more than 30% year-over-year in the third quarter as chip shortages led to production interruptions and a decrease in available inventory at dealerships. U.S. auto sales are expected to fall by at least 13% in the third quarter of 2021 due to disruptions in production due to chip shortages. Major companies in the industry such as Ford, Volkswagen (Reuters, 2021)[35] and Daimler have been forced to suspend production at various points and cut back on their production targets due to chip shortages. Maruti Suzuki, India's largest car manufacturer, cut production by 60% in September 2021 due to semiconductor shortages. (MoneyControl, 2021)[36]

Also, due to a shortage of chips and an increase in demand for mining equipment, video cards have risen in price; many models have increased in price by 2-2.5 times compared to 2020.

Tourism and hospitality sector

Tourism is one of the industries that has been hardest hit as the virus spread, international events from entertainment to business have been canceled one after the other. According to a UN report last year, global tourism lost $4 trillion due to the pandemic (UN, 2021)[37].

International tourism and closely related industries suffered a loss of $2.4 trillion in 2020. By the end of 2021, losses will also amount to $1.7 trillion to $2.4 trillion, according to a joint report by the UN World Tourism Organization and the UN Conference on Trade and Development.

According to the report, in 2020 the number of foreign tourists in the world decreased by 1 billion people, or 73%. In the first quarter of 2021, this indicator decreased by 88% compared to the same period last year.

[35] https://www.reuters.com/business/autos-transportation/volkswagen-executive-sees-global-chip-shortage-running-well-2022-2021-10-19/

[36] https://www.moneycontrol.com/news/business/in-depth-the-semiconductor-shortage-what-caused-the-supply-crunch-and-how-long-will-it-last-7501241.html

[37] https://news.un.org/en/story/2021/06/1095052

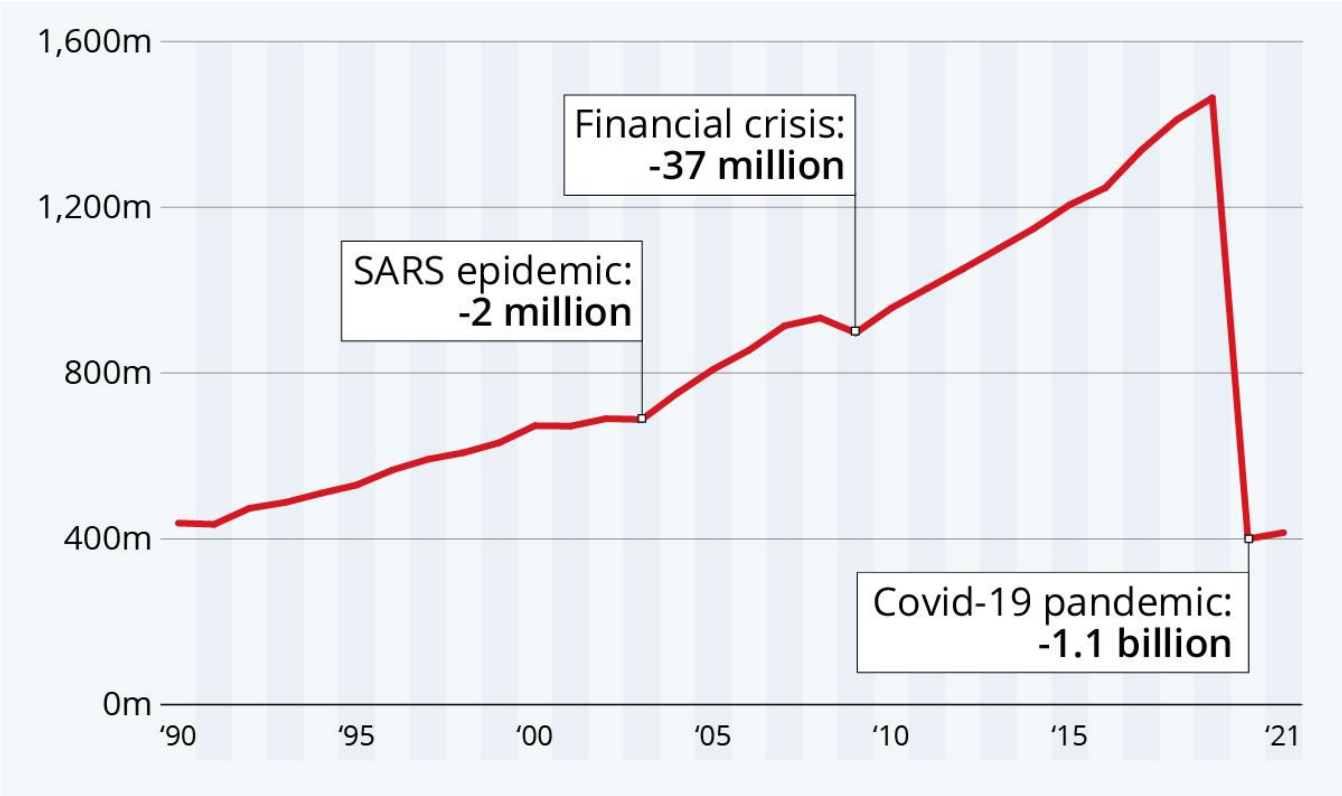

Figure 15. International tourist arrivals worldwide since 1990 (World Economic Forum, 2022)[38]

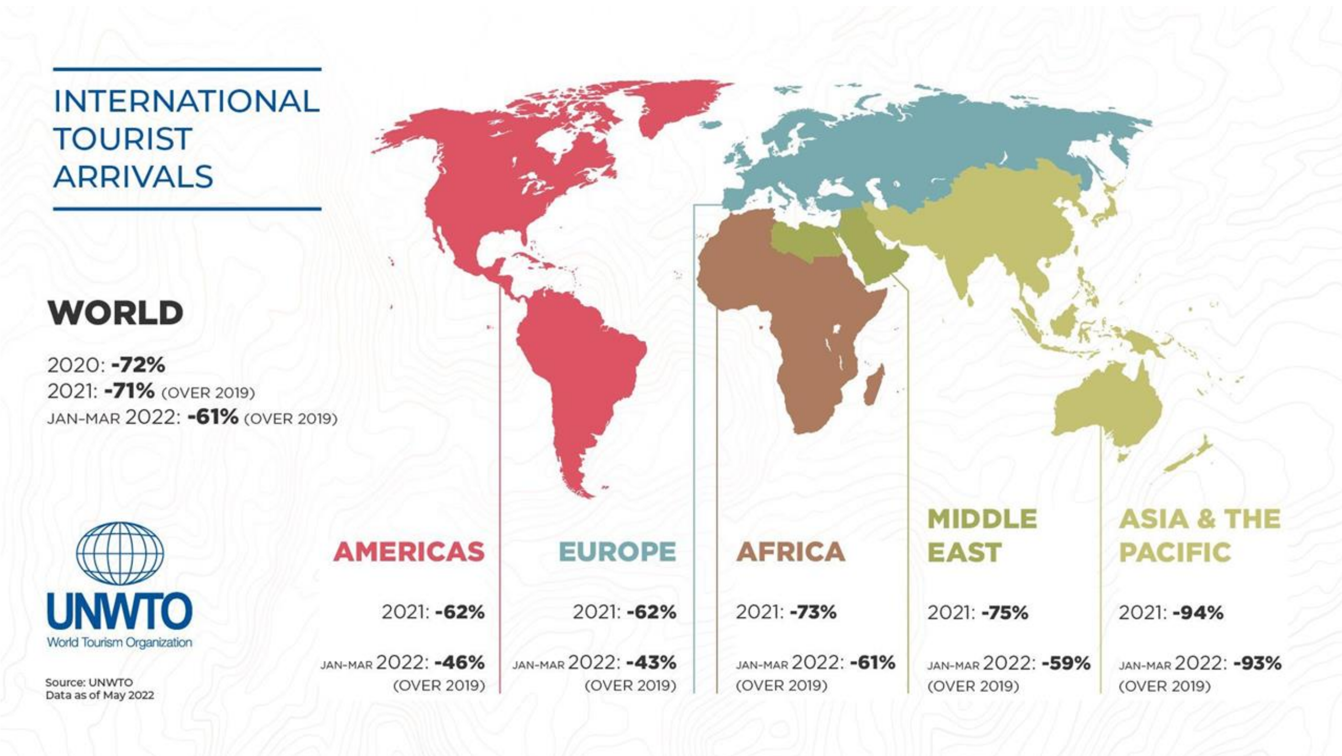

Figure 16. International tourist arrivals worldwide[39]

[38] https://www.weforum.org/agenda/2022/01/global-travel-tourism-pandemic-covid-19/
[39] Source: UNWTO

The recovery of the tourism sector will depend on the availability of COVID-19 vaccines. The fastest recovery in the tourism sector is in France, Germany, Switzerland, the UK and the US, and this will happen no earlier than 2023. The recovery in international tourism began to noticeably improve starting in the second half of 2021, when countries around the world gradually began to ease or completely remove restrictions.

Pandemic also had the most negative impact on the restaurant business, as part of the hospitality industry. Contactless delivery was a new trend. Fleeing from the coronavirus, people were forced to self-isolate and avoid public places. Chinese restaurants were the first to feel the need for contactless delivery. There, already in early February 2020, food delivery using contactless technology accounted for 80% of all orders. Following China, other countries began to deliver contactless. From the restaurant business, the chain reaction spread to other markets. Consumers have begun asking couriers to leave pre-paid orders at the door to avoid unnecessary contact. Gradually, even those stores for which this service seemed superfluous until recently switched to delivery "without contact".

Airlines

The air travel market is experiencing a major crisis due to the coronavirus pandemic. It became unsafe to fly, one country after another was closed for quarantine, fleeing the spread of infection, governments quickly introduced restrictions. In many countries, the issuance of visas was suspended, states put arriving passengers on two to three weeks of quarantine. People had to quickly change plans, spend holidays at home or organize business meetings in a virtual format. The closure of borders, a ban on flights, a total drop in passenger traffic - air carriers around the world were the first to face the crisis caused by the coronavirus pandemic. This is quite expected, since volatility in the transport industry is 1.5–2 times higher than in other services, and 2.5–3 times higher than in industry and construction.

According to the McKinsey's report, airlines – with the exception of air cargo carriers – were the biggest destroyers of value in the aviation industry during the first year of the pandemic with the $168 billion losses. If to talk about the total cumulative losses for 2020-2022, the number provided by IATA is enormous and expected to reach $201 Billion (IATA, 2021)[40].

[40] https://www.iata.org/en/pressroom/2021-releases/2021-10-04-01/

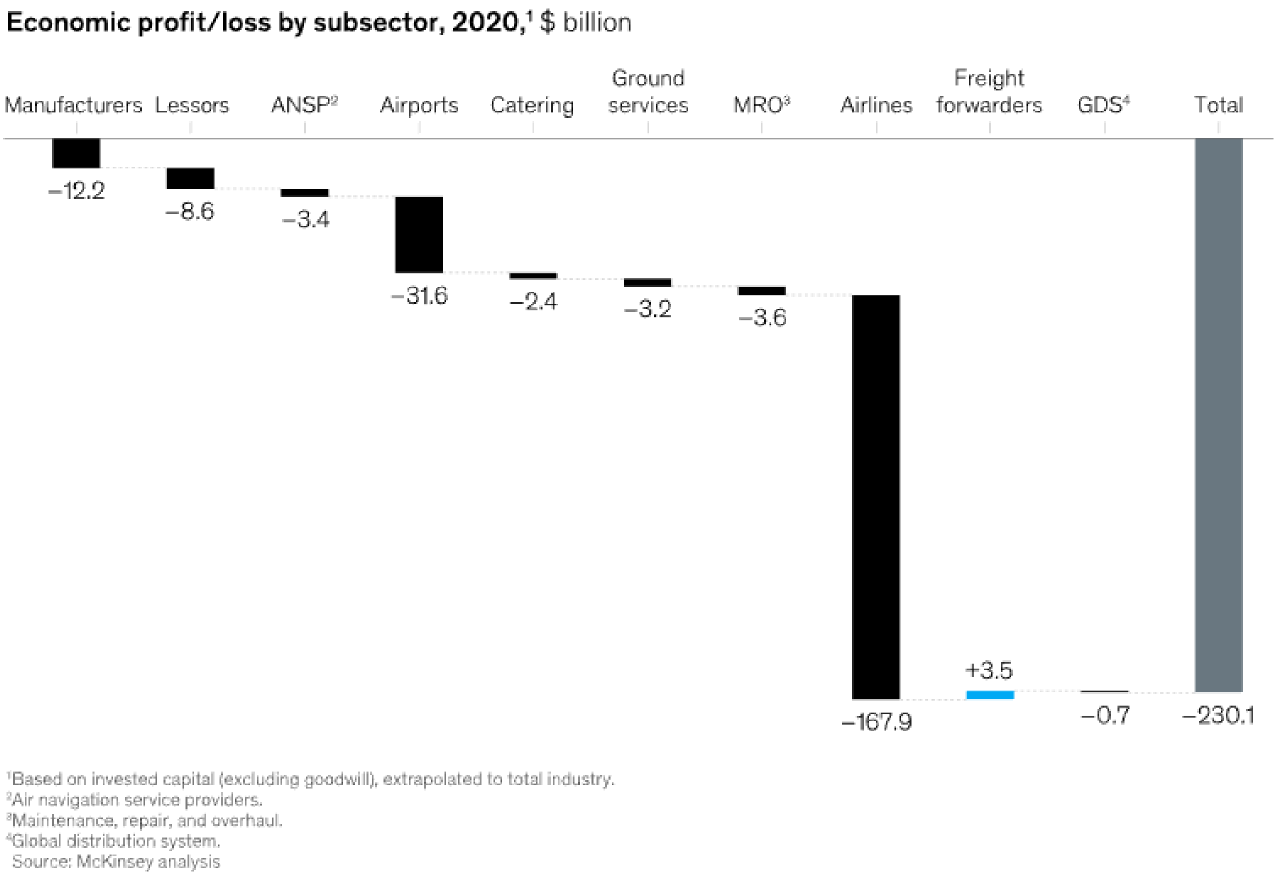

Figure 17. Economic profit/loss by subsectors of Air Industry, 2020[41]

Airlines around the world are reporting financial problems. It will take several years for the air transportation market to recover. In 2020, the volume of international air travel in the world decreased by 60 percent due to the COVID-19 pandemic, the International Civil Aviation Organization said. The total number of passengers carried was 1.8 billion compared to 4.5 billion in 2019.

Pharm industry

The pharmaceutical industry is obviously one of the few sectors that have been among the winners. Governments have been forced to spend billions to develop or purchase vaccines. Here it was important to have the competence and resources to be among the first to develop a treatment. Shares of companies involved in these vaccine developments skyrocketed. Among them are Moderna, Novavax and AstraZeneca. But Pfizer failed to win the trust of investors because of high competition, because of the high cost of production and management of the vaccine.

[41] Source: McKinsey

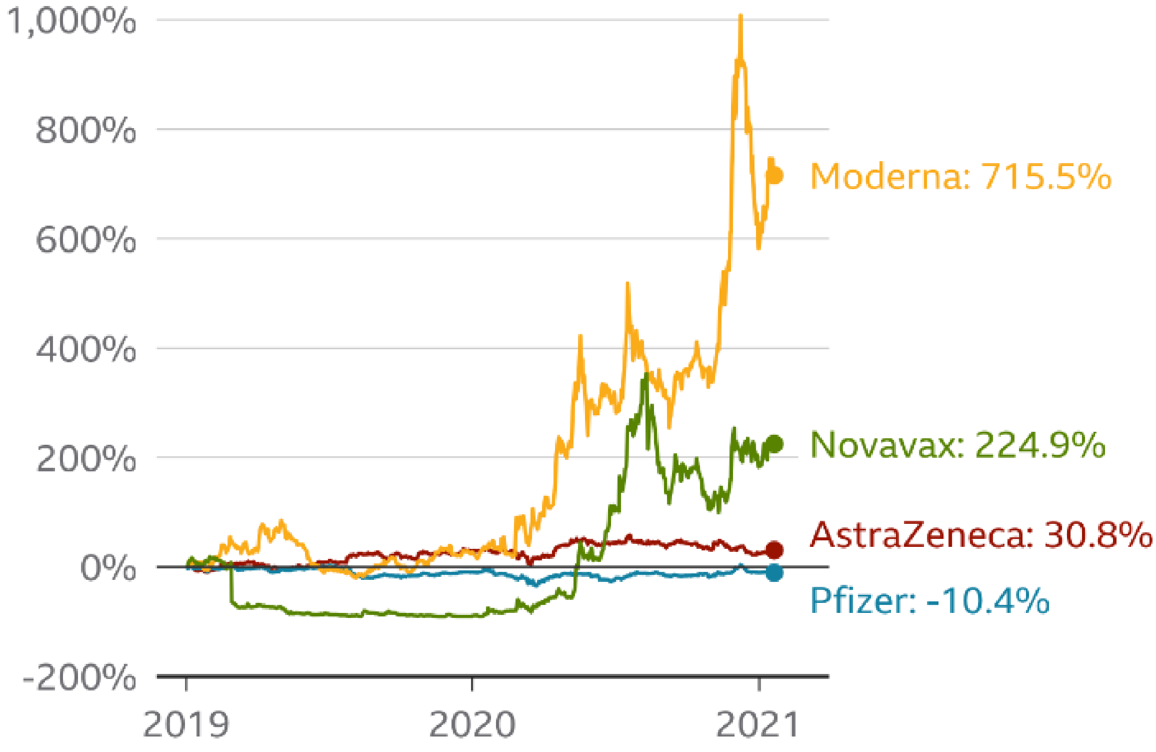

Figure 18. The rise of pharmaceutical companies (percentage change in share value)[42]

4. *Nowadays*

4.1 What we have?

Change in behaviors of companies and consumers

The coronavirus pandemic is one of the biggest challenges businesses have faced in recent years. Along with a war or an environmental disaster, quarantine has dramatically affected the course of many processes, and has also significantly changed the behavior and habits of people. As we noted earlier, this had implications across the board – some markets didn't survive the corona crisis at all, others changed forever.

People's priorities have changed, and consumption is shifting from material positions (goods) to intangible ones (services). For example, refusing to buy a car, which costs as much as two average annual salaries of a Russian, in favor of a taxi, carsharing, or remote work from home/coworking in general, leaves a reserve of money for entertainment and recreation for years to come. Fewer trips to cafes, bars and restaurants also frees up funds for the purchase of digital services: from music and movie subscriptions to remote medicine and other relatively new services.

The result of the introduced quarantine was also the growth of online sales. Frightened by an unknown virus and obliged to comply with a strict regime of self-isolation, people were quickly forced to learn online. The education

[42] Source: Bloomberg, 24 January 2021

of users and the depth of internet use have increased significantly. It became a part of everyday life, and then even those who could not use the self-service checkout in the supermarket were forced to learn how to buy essential things on the Internet. The highest peak of activity on the Internet occurred in March and early April, that is, at the peak of panic and global isolation. As we know, it takes 21 days to form a habit, while society has been in strict isolation for several months. During this time, people have become so accustomed to shopping online that now online stores are already starting to compete with offline points of sale, even in those segments that we could not even think of before, such as high-quality fresh products.

On the other hand, enterprises started to focus and increased efforts to sell goods or services via internet. For decades, digital technologies have enabled businesses to transform or even expand their businesses. But Covid-19 has accelerated this process and forced them to transition as a new sales channel, highlighting the potential of digital technologies to increase the economic resilience of businesses. Already, market research indicates (Zoovu, 2022)[43] that e-commerce will reach a new level after the pandemic is over. And FMCG brands, which are ready to finally go online, need to think about this right now and think over their own development strategy. Now it is very important to take advantage of quarantine bonuses and finally win over consumers. This mentioned 4 statistics about e-commerce and changes in consumer behavior amid COVID-19:

- 52%: consumers that won't go back to grocery shopping in-store
- 58%: online shoppers expect to order more online in coming months
- 60%: EU consumers who will continue shopping online at the same level after the outbreak
- 25%: US consumers who can't find what they're looking for online

If you're not online, you don't exist.

In quarantine, consumers were forced to be in a long isolation, in which all the main entertainment was also forced to move online - world stars staged home concerts here, showed performances by the best theaters, and the like.

This has forced many to change not only their online shopping habits, but also those associated with online content consumption. Looking for information about the virus or watching the lives of stars, people are addicted to social networks. A study by Kantar (Kantar, 2020)[44] showed that since the beginning of the pandemic, TV viewing has increased by 63%, and time spent on the Internet has increased even more: by 70%. They began to spend much more time watching videos on digital platforms, listening to music and listening to internet radio. How to use it to your advantage? Increasing the consumption of such content is the best opportunity for brands to communicate with their consumers, because now anyone can be caught online with the help of competent targeting. If suddenly you are a brand that is still not online for some reason, change tactics immediately, or you will die.

[43] https://zoovu.com/blog/4-stats-covid-19-ecommerce/
[44] https://www.kantar.com/Inspiration/Coronavirus/COVID-19-Barometer-Consumer-attitudes-media-habits-and-expectations

Daily communication with the consumer is now key for any brand. Yes, the pandemic has drastically changed the behavior and purchases of people around the world, but these changes will continue in the future. Therefore, it is extremely important to understand whether a brand, product or service continues to meet the needs of the consumer every day. After all, the only way to be able to adjust to market fluctuations is to be in the know.

Remote work

Remote work as a phenomenon appeared a long time ago, as well as the technologies that provided it. However, before the coronavirus pandemic, the ability to work from home all the time or a few days a week was more of a privilege. The coronavirus epidemic has made “remote work” a mass phenomenon and it has proven itself to be successful, as 58.6% of the US workforce is now remote, and 16% of businesses across the world are fully remote, according to an Owl Labs study. (FindStack, 2022)[45]

In the United States, according to Global Workplace Analytics, before the epidemic, 4.1% of employees worked remotely at the peak of the pandemic - 69%. And it looks like working from home will remain the “new normal” even as restrictions on office visits are lifted. Often employees are ready to quit if the employer does not agree to give them the opportunity to work from home at least a few days a week. The transition to remote work has presented many new challenges for IT structures, in terms of providing access to corporate resources, tracking working hours, organizing meetings and, of course, ensuring the security of remote work.

[45] https://findstack.com/remote-work-statistics/

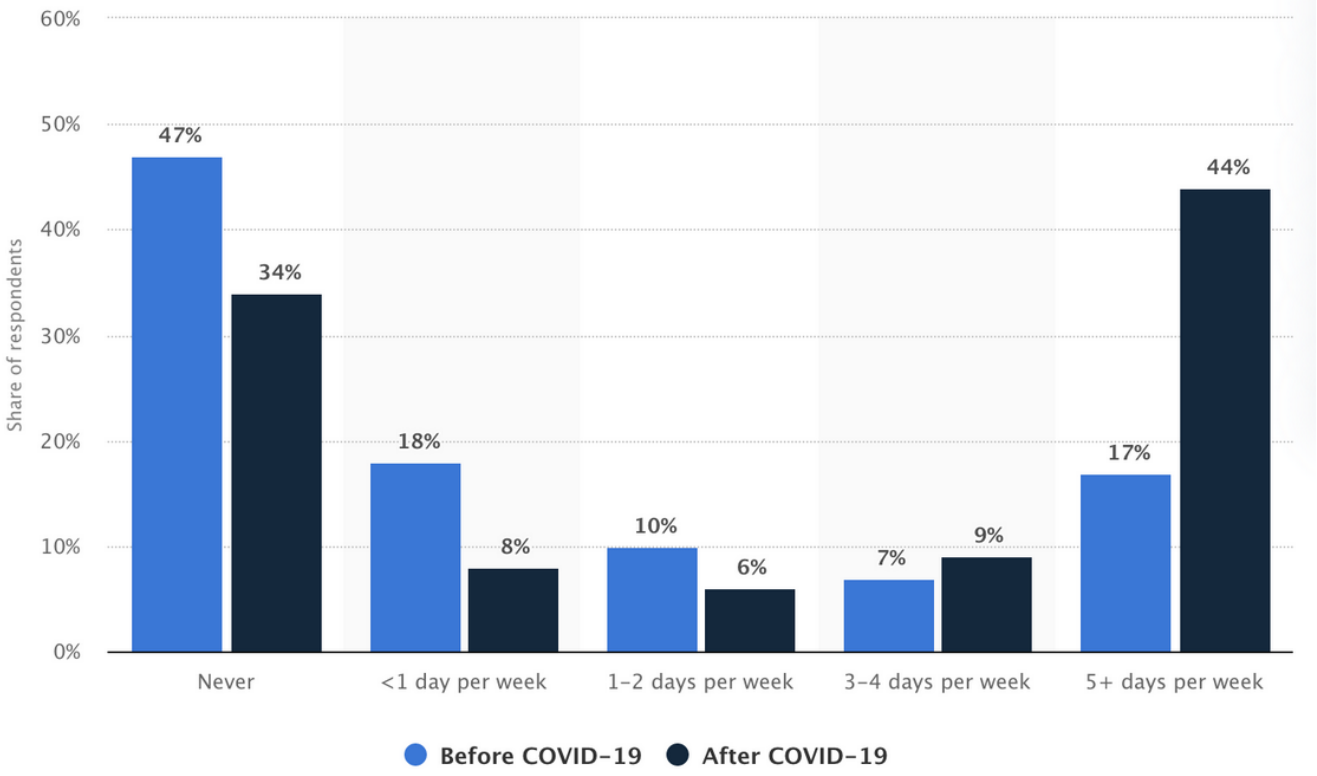

Figure 19. Remote work experience Before and After COVID-19 [46]

The OECD conducted a study (González-Vázquez, Milasi, & Fernández-Macías, 2021)[47] on trends and differences in the prevalence of teleworking across the European Union, across sectors and occupations prior to the coronavirus outbreak. The research data showed that prior to the coronavirus outbreak, teleworking was most represented in the ICT and knowledge-intensive sector, as well as among high-skilled workers, with significant differences across the EU. In fact, the prevalence of this type of work varied significantly within the same sector or within the same occupational group in different countries, which suggests that in addition to differences in employment and production structures, other factors associated with differences in organizational culture and management culture are crucial for explanation for such significant differences.

The virus outbreak has evened out the percentage of remote work in countries. However, the trends before it could provide guidance for further expansion of teleworking during and after the recovery period without compromising productivity, and for predicting an uneven distribution of remote work across the EU.

Health has become the greatest value.

Finally, the virus has forced us to think carefully about our own health and hygiene. And it's not just hand washing or protective masks. As our experience shows, during the quarantine, people began to deal more with immunity

[46] Source: Statista
[47] https://www.oecd-ilibrary.org/economics/telework-before-the-covid-19-pandemic_d5e42dd1-en

and be more attentive to their own bodies. Finally, the virus has forced us to think carefully about our own health and hygiene. And it's not just hand washing or protective masks. As our experience shows, during the quarantine, people began to deal more with immunity and be more attentive to their own bodies.

The likelihood that this trend will take hold for a long time and become one of the main ones is very high. When the pandemic is in the past, consumers will continue to monitor health and hygiene at the same high level for some time. This means that now those brands that offer products with added value — antibacterial properties, improved immunity, healthy and safe labeling, eco-friendly composition, and the like — can win now. It is worth remembering this when creating any new products and releasing them to the market. Safe and healthy products will be the first to attract the attention of consumers.

Another point worth paying attention to is the quality and efficiency of products. Now is a unique time when they come to the fore in many categories. As global studies show, people are now willing to pay more for those goods that have unique properties or are significantly different in quality from others. So, in some segments it is quite possible to bet on more premium (and, in the perception of buyers, better) products.

People are trying new things

At the beginning of the quarantine, the demand for goods online was extremely large, so that the stores were not placed with orders. Plus, many experienced problems with supplies and from time to time simply could not be the goods in the required volume. This is due to the fact that many consumers began to replace conventional brands with others.

What does it say? Chances are, if this experience with a new brand was the most popular, brands already have a chance to gain new consumers, so it's worth increasing advertising efforts and fighting to finally win over users to your side. There are many studies that prove that products launched during a recession have both a high chance of long-term survival and higher sales demand. It really works.

Another good news for brands is that during the quarantine, consumers are more likely to develop a habit of trying new things. They are no longer afraid and most often continue to meet in experiments in which the strongest win.

4.2 What to do?

Government's support

The IMF believes that countries should continue to support the population and business, but at the same time, to avoid "deep scars" after a pandemic, keep the level of debt within reasonable limits.

The cost of universal vaccination, in which vaccinations are equitably distributed across and within countries, is arguably the most profitable investment in human history. This is stated in a report of the International Monetary

Fund (IMF, 2021)[48]. Profits in developed countries until 2025 will be more than one trillion dollars, but only if the pandemic can be curbed around the world. “The sooner vaccinations curb the pandemic, the faster economies can return to normal.” – IMF statement. The COVID-19 vaccination will thus more than pay for itself, according to the April 2021 Fiscal Monitor (IMF, 2022)[49], providing excellent value for the public money invested in it.
In a favorable scenario, trillions of dollars will also be saved by cutting back on budget support measures. Thus, universal vaccination will pay off in excess. So far, the situation remains uncertain and requires "flexibility" from governments.

“The first lesson we have learned from a pandemic that has been going on for a year is that fiscal policy action can be timely and decisive,” said Vitor Gaspar, director of the IMF's Fiscal Affairs Department. - Countries with greater access to funds or significant reserves were able to provide more budgetary support and, accordingly, recover faster from the crisis. These measures have played a very important role and should be used to the full. "

At the same time, huge spending, coupled with a decline in tax revenues, led to a significant increase in the deficit. In 2020, the average overall deficit relative to GDP was 11.7 percent in advanced economies, 9.8 percent in emerging market economies, and 5.5 percent in low-income developing countries. In emerging market and developing economies, budget support was less extensive - they simply did not have the opportunity to borrow more money, however, due to the reduction in tax revenues, the budget deficit grew there too.

“Until the pandemic is completely overcome, fiscal policy must remain flexible,” notes Gaspard. The IMF recommends continuing to provide targeted assistance to the most vulnerable segments of the population. In support of private business, governments should pay more attention to viable companies to avoid wasting resources.

Given that the pandemic continues, the authorities must look for a "golden mean" - not to leave the population and business without support, at the same time to control the level of debt. “Each country has its own structure, institutions and financial capabilities. Therefore, the policy should be developed considering these peculiarities” - the IMF representative emphasized.

The IMF notes that some countries may need to start rebuilding fiscal buffers to reduce the impact of future shocks. For this, it is necessary now to lay "reliable long-term foundations in the field of income and expenses," experts emphasize. This is especially important for countries with high levels of debt and limited access to finance.

Experts are generally optimistic: they believe the deficit will shrink across the board as the economy recovers. But it all depends on the pace of vaccinations, which will bring the end of the pandemic closer and reduce the cost of additional budget support. If the pandemic drags on, it threatens to leave "deeper scars", the IMF notes. Risk factors include sharply tightening financing conditions amid high indebtedness, a significant increase in bankruptcies, fluctuations in commodity prices and growing social discontent.

[48] https://blogs.imf.org/2021/04/07/tailoring-government-support/
[49] https://www.imf.org/en/Publications/FM

"Perhaps universal vaccination around the world - this is the best investment in the global history - said Vitor Gaspar, - The report notes that the existing inequality exacerbated the effects of the pandemic, which, in turn, will further deepen inequality. It is a vicious circle that threatens to undermine trust and social cohesion. Therefore, it’s recommended more decisively pursuing a policy of reallocating resources in order to provide everyone with social protection and access to education and health care. ”

New vision

In 1930, the British economist John Maynard Keynes predicted that technological advancement would lead to a dramatic reduction in labor time. Keynes concluded that lowering interest rates, expanding the money supply, and other monetary policies could only go so far. Getting an economy out of a deep depression, he argued, required fiscal policy measures such as government borrowing and deficit spending.

States have paused economies and businesses closed their doors to try to limit the spread of the virus. Factories are idle and the world is experiencing a storm. Whether the government's response was necessary or excessive is part of the big debate, but it has already happened. As we move from frantic survival to recovery, businesses need to seize this opportunity.

Many companies are still operating, have withstood falling revenues, quarantines, and experienced initial recessions. Now they need to take advantage of this recovery period and lay the foundation for future growth. Here are the top 5 reasons why companies need to invest in renewing their growth strategy today:

1. To turn the urgency of the crisis into an impulse for the future

2. To get an edge over new trends

3. To adapt to a technology-driven market

4. To take advantage of a strong talent pool

5. To build resilience into your strategy

By considering these reasons and moving towards renewed growth strategies, businesses can position themselves for success in a recovery and post-pandemic world. They will have a better understanding of their clients' problems and what they can do as a business to solve them, thereby working to increase market share, enter new markets and grow revenues.

Turn the urgency of a crisis into an impetus for the future

Take the momentum, energy, and urgency that went into surviving the pandemic and use it to grow as we emerge from the pandemic. Business today is focused on survival. Workarounds and workarounds have been proposed to keep businesses running and serving customers as best they can. These changes range from enabling telecommuting and increasing digital customer service capabilities to self-catering at home — all designed to keep businesses running smoothly. While companies used to be able to contain the costs required to further digitalize their businesses, modernize internal operations, expand their product mix, or enter new markets, the pandemic has forced companies to change course and focus their executives on maintaining revenue and lowering costs, or ultimately on survival of the company. Some businesses will, of course, reduce momentum due to the frantic pace of change they have been grappling with to update operations in the early stages of the pandemic and return to a more normal pace of "business as usual." However, there are opportunities for other businesses that choose to capitalize on the current changing landscape and the internal impetus of existing change.

One of the main problems with change is that few people like it - employees are afraid of it, and management requires a lot of effort. However, during this pandemic, everyone understands the need for transformation, and major changes are already taking place. This momentum is something that companies must continue to not only sustain, but develop, setting themselves up for future growth, as long-term structural reforms, investment and changes in the way we operate are required to better address growth in a post-pandemic world. This could potentially lead to significant investment requirements and major operational changes. Organizations can use the current time of a weak economy to continue their evolution and try to adapt to the new reality. By doing so, potentially, any company can outstrip most of the competition.

Get the first mover advantage in emerging trends

The world has changed due to the pandemic. Be the first in your industry to recognize and capitalize on trends. The pandemic has changed society everywhere, accelerating some trends, such as the introduction of new technologies and digitalization, or the explosive growth of teleworking. These trends provide valuable opportunities for those organizations that can benefit from them. To take advantage of emerging trends, businesses need to view change at the macro level and from a strategic, forward-looking perspective. For example, looking at declining retail store traffic, increasing e-commerce, and increasing telecommuting, it can be concluded that affected organizations should consider these behavioral changes and shape decisions based on which changes and trends are temporary, which are permanent, and which will be. evolve over time.

McKinsey's Global Executive Survey (McKinsey Global Institute, 2020)[50] in July 2020 found that 62% of respondents believe the changing customer needs and expectations caused by the pandemic will continue into the future. It is important to note that this does not mean that all the changes caused by the pandemic will continue. As an example, consider the impact of COVID-19 on the insurance industry. A recent Ipsos survey of 2,500 insurance clients shows a growing consumer interest in life and health insurance products, with access to virtual health services seen as more important to consumers than out-of-pocket payments. This highlights the changing needs of consumers and the different ways that insurance companies can transform now. It is important to note that when considered in conjunction with other trends such as increased demand for digital sales

50 https://www.mckinsey.com/~/media/McKinsey/Industries/Public%20and%20Social%20Sector/Our%20Insights/Future%20of%20Organizations/What%20800%20executives%20envision%20for%20the%20postpandemic%20workforce/What-800-executives-envision-for-the-postpandemic-wor

channels, it can serve as a guideline for insurers to make decisions about what products they offer and how they offer them. However, if they want to do this, they need to act as early as possible and act quickly.

Adapt to a technology-driven market

Technology and growing digitalization have been pervasive topics in the global economy. The pandemic has dramatically increased these trends, and businesses need to keep moving in that direction. COVID-19 only serves to accelerate and intensify these trends. Signs of a technological revolution are everywhere, whether it's tech stocks pushing the stock market up, consumers accelerating their digital shopping journey, or staff being forced to work from home. Comparing the results of the McKinsey survey in July 2020 with surveys from previous years, on average, enterprises have accelerated the digitalization of most aspects of their organization.

Organizations need to respond effectively to this trend by identifying how they can take advantage of technology to adapt and improve their working methods. Whether it's insurance companies shifting to digital policy offerings or banks shifting to expanding online offerings to replace in-person branch visits, companies need to focus on how technology can help them grow. Prior to the pandemic, roughly 50% of businesses "prioritized digital transformation," according to BCG's Global Digital Strategy Roadmap 2020 (BCG, 2020)[51]. However, that number currently stands at over 80% of companies, indicating that "accelerating their digital transformation is a strategic imperative." Digitalization can become an equalizer - leveling the playing field between competitors of different sizes and opening up new markets for organizations. Technology must provide strategy and create a solid platform for expanding the customer base.

Benefit from an extensive talent pool

Due to the pandemic job cuts, the number of highly qualified job seekers is very high. The pandemic has resulted in job cuts across all industries. Although this situation is dire, it has a positive effect. Business has the ability to attract the best. The talent pool (if you can call it that) of those looking for work is now the highest in the last 20 years. And as organizations contemplate how to move forward, they should think about the required capabilities and skillsets that are currently missing. New areas of growth mean new talent is required within organizations, and the pandemic has provided an excellent opportunity to hire the best and develop new growth points. Businesses can now make bold decisions based on their updated, well-defined growth strategy.

Add resilience to your growth strategy

Businesses have seen how unexpected shocks can affect their industry and competitiveness. If this pandemic has demonstrated anything economically, it is the fragility of global supply chains. We saw this in the early and middle stages of the pandemic; China, the world's manufacturing center, came to a standstill and its effects were felt by businesses around the world. While global supply chains do not affect every business, all companies need to keep

[51] https://www.bcg.com/publications/2020/the-evolving-state-of-digital-transformation

a core message in mind. Companies cannot afford to rely too much on one vendor, customer, process, or third-party technology software — anything that can fail through no business fault.

The key takeaway for businesses is that sustainability must be built into their strategic planning. Companies cannot think through all possible options and cannot always plan for all potential risks. However, it is important to consider possible risks during strategic planning, to ensure better preparedness and flexibility in the growth strategy. The company's ability to repeat, try, measure, and correct allows it to quickly change operations when faced with sudden adverse conditions. During this pandemic, technology and the ability to scale and deploy quickly have been a lifesaver for a number of businesses, such as office organizations. However, it was unable to save others, such as event organizers and the hospitality industry. Flexible strategies will be the foundation of future existence.

5. Conclusion

Objectively, the world is still in the midst of a pandemic crisis. While active cases have dropped in some countries, much of the world is still struggling with another wave of the virus. However, initial panic and severe economic restrictions have subsided, and governments are shifting to how to deal with the virus while keeping economies active. A new reality is taking shape that is likely to persist over the next few years as we all learn to work in a COVID-19 environment. Thus, now is a critical time for companies to evaluate and update their growth strategy.

Strategy is evolution; successful companies are constantly analyzing, evaluating and adapting it. Organizations must capture the momentum they used to survive and use it as a springboard for growth. Moving towards future growth, organizations can identify and capitalize on emerging trends, gaining a pioneering advantage in trends such as technology adoption and global business digitalization. To achieve this, organizations may need to build on existing internal capabilities and seek external reserves. The pandemic has given us an invaluable gift: a market for the best candidates. Combining all of this with a focus on resilience, the ability to change business strategy and operations, and be agile, will allow businesses to emerge from this pandemic in a stronger position than they were and be prepared for growth in the new year. But the strongest survive. The crisis is a good opportunity to start transforming online.

Coronavirus can take part in the meetings. But there are three obvious end results.

First, heavy chains have a weak point. The development of technology is already pushing production to infections. The factory in New York, which employs robots, is replacing the factory in Shanghai, which employs humans. Location of production closer to the consumer of emissions. This process of invasion is already on its way. The disruption of supply chains, together with the uncertainty created by some countries' leaders, could increase this process. This means that after the epidemic, investment may start to rise as the probability lines readjust.

The second conclusion: people had to work remotely, it might be fun. And companies are suddenly discovering that employees are great at working from home. Changing work habits are changing the demand for office space, transportation and technology.

The third long-term effect is the growth of online shopping. It has already been in most countries of the world. But people who are used to online shopping in the old epidemic may not want to go back to the old method of shopping after it ends. The important point here is that economic data may not be tracked. If statistics underestimate online sales, then consumer spending may appear less than it really is.

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